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An Appraisal of Third-Party Mechanisms in Settling International Environmental Disputes

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Submitted in accordance with the requirements
for the degree of Doctor of Philosophy

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The University of Dundee

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ABSTRACT

International environmental disputes frequently have characteristics that distinguish them from other kinds of international disputes. Such characteristics of international environmental disputes include the following. Firstly, a dispute may be bilateral, multilateral or hybrid in character. Secondly, international environmental disputes frequently have a multi-dimensional character which includes the complexity of the scientific or technical information associated with a dispute and the complexity of questions relating to social, economic and political choice. Thirdly, international environmental disputes may entail difficulties in identifying the source of the alleged breach of an international environmental obligation. Fourthly, international environmental disputes may involve complex questions of quantifying damages. Lastly, international environmental disputes may involve the interpretation and application of procedural obligations. International environmental obligations of a procedural character.

Given the characteristics of international environmental disputes, this thesis aims to study the suitability and effectiveness of the existing third-party mechanisms in settling such disputes. This thesis attempts to find suitable means by examining the nature of each dispute settlement mechanism and making an evaluation in order to find out how each mechanism can provide processes or procedures that correspond to the special characteristics of environmental disputes. With regard to the question of effectiveness, criteria of effectiveness will be established and then each of the mechanisms will be assessed in the light of those criteria. This thesis also proposes some recommendations that would have a chance of being carried out in practice in order to address problems or drawbacks that appear to be an obstacle to the better resolution of international environmental disputes.

This thesis shows that judicial means are suitable for deciding bilateral environmental disputes and interpreting and applying procedural obligations. They are not suitable for deciding cases involving multiple parties, multidimensional disputes, quantifying environmental damages or identifying the sources of breach of environmental obligations, except ad hoc arbitration where parties can set up arbitral procedures which suit a specific characteristic of the environmental disputes at issue. Diplomatic means are suitable for deciding bilateral and multilateral disputes, multidimensional disputes but they are not suitable for awarding environmental

damages and interpreting and applying procedural obligations. As far as the effectiveness is concerned, this thesis shows that most of the disputes brought before judicial and non-judicial means were settled and the parties complied with the judgments, awards, findings and recommendations. However, in most cases, they have had only a limited impact on the behaviour of the parties in the sense that they were not successful in changing States' behaviour so discourage future violations and deter the emergence of future disputes.

This thesis suggests that all of the dispute settlement mechanisms can be used in a collaborative manner. The fact that the parties decide to litigate in international courts does not mean that the other mechanisms would be excluded. Before or during the course of the judicial proceedings, diplomatic means can always be resorted to. Successful environmental dispute resolution depends partly on the readiness of the parties to end a dispute and partly on the structure of the dispute settlement mechanism. Governments would have to decide what mechanisms could accommodate the unique characteristics of international environmental disputes that are at issue, taking into account all of the considerations discussed in this thesis.

DECLARATION

I, Krisdakorn Wongwuthikun, hereby declare that this thesis has been composed by me, that it is a record of work carried out by me, and that no part of it has not been submitted in any previous application for a higher degree at this University or any other institutions of learning.



Krisdakorn Wongwuthikun

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TABLE OF CASES

PCIJ Cases

Case Relating to the Territorial Jurisdiction of the International Commission of the River Order (Great Britain, Czechoslovakia, Denmark, France, Germany, and Sweden v. Poland) (Judgment) PCIJ Rep Series A No 23

Diversion of Water from the Meuse (Netherlands v. Belgium) (Judgment) PCIJ Rep Series A/B No 70

Factory at Chorzów (Germany v. Poland) (Claim for Indemnity) (Merits) PCIJ Rep Series A No 17

Interpretation of the Judgments Nos. 7 and 8 (The Chorzów Factory) (Germany v. Poland) (Judgment) PCIJ Rep Series A No 13

Interpretation of the Statute of the Memel Territory (Great Britain, France, Italy, Japan v. Lithuania) (Preliminary Objection) PCIJ Rep Series A/B No 47.

Rights of Minorities in Upper Silesia (Minority Schools) (German v. Poland) (Merits) PCIJ Rep Series A No 15

The Mavrommatis Palestine Concessions (Greece v. United Kingdom) (Merits) PCIJ Rep Series A No 2

The S.S. “Wimbledon” (France, Great Britain, Italy, and Japan v. Germany) (Judgment) PCIJ Rep Series A No 1

ICJ Cases

Aerial Herbicide Spraying (Ecuador v. Colombia) (Application Instituting Proceedings) [2008]

Alleged Violation of Sovereign Rights and Maritime Spaces in the Caribbean Sea (Nicaragua v. Colombia) (Preliminary Objections) [2016]

<<http://www.icj-cij.org/docket/files/155/18948.pdf>>

Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)/Construction of a Road in Costa Rica Along the San Juan River (Nicaragua v. Costa Rica) (Judgment) [2015]

Case Concerning Application of the International Convention on the Elimination of All Forms of Racial Discrimination (Georgia v. Russian Federation) (Preliminary Objections) [2011] ICJ Rep 70

Case Concerning Armed Activities on the Territory of the Congo (Congo v. Uganda) (Judgment) [2005] ICJ Rep 168

Case Concerning Certain Phosphate Lands in Nauru (Nauru v. Australia) (Preliminary Objections) [1992] ICJ Rep 240

Case Concerning the Continental Shelf (Tunisia v. Libyan Arab Jamahiriya) (Application by Malta for Permission to Intervene) (Judgment) [1981] ICJ Rep 3

Case Concerning the Continental Shelf case (Libyan Arab Jamahiriya v. Malta) (Application by Italy for Permission to Intervene) (Judgment) [1984] ICJ Rep 3

Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v. Slovakia) (Judgment) [1997] ICJ Rep 7

Case Concerning Maritime Delimitation and Territorial Questions between Qatar and Bahrain (Qatar v. Bahrain) (Merits) [2001] ICJ Rep 40

Case Concerning the Northern Cameroons (Cameroon v. United Kingdom) (Preliminary Objections) [1963] ICJ Rep 15

Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)
(Judgment) [2010] ICJ Rep 14

Corfu Channel case (UK v. Albania) (Order) [1948] ICJ Rep 124

Corfu Channel case (UK v. Albania) (Order) [1949] ICJ Rep 237

Fisheries Jurisdiction (UK v. Iceland) (Judgement) [1974] ICJ Rep 3

Haya de la Torre (Colombia v. Peru) (Merits) [1951] ICJ Rep 71

Interpretation of the Peace Treaties with Bulgaria, Hungary and Romania (first phrase) (Advisory Opinion) [1950] ICJ Rep 65

La Grand (Germany v. United States of America) (Request for the Indication of Provisional Measures) [1999] ICJ Rep 9

Land, Island and Maritime Frontier Dispute (El Salvador v Honduras: Nicaragua intervening) (Judgment) [1992] ICJ Rep 351

Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion) [1996] ICJ Rep 226

Monetary Gold Removed from Rome in 1943 (Italy v. France, UK, US) (Judgment) [1954] ICJ Rep 19

Nuclear Tests Case (Australia v. France) (Judgment) [1974] ICJ Rep 253

Nuclear Tests Case (New Zealand v. France) (Judgment) [1974] ICJ Rep 457

Question Relating to the Obligation to Prosecute or Extradite (Belgium v. Senegal) (Judgment) [2012] ICJ Rep 422

Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v. France) Case [1995] ICJ Rep 288

South West Africa (Ethiopia v. South Africa; Liberia v. South Africa) (Preliminary Objections) [1962] ICJ Rep 319

South West Africa cases (Ethiopia v. South Africa; Liberia v. South Africa) (Order) [1965] ICJ Rep 9

Territorial and Maritime Dispute case (Nicaragua v. Colombia) (Application by Costa Rica for Permission to Intervene) (Judgment) [2011] ICJ Rep 348

Whaling in the Antarctic (Australia v. Japan: New Zealand intervening) (Order) [2013] ICJ Rep 3

Whaling in the Antarctic (Australia v. Japan: New Zealand intervening) (Judgment) [2014] ICJ Rep 226

ITLOS Cases

Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (2011) ITLOS, Seabed Disputes Chamber, (2011) 50 ILM 458

Case concerning Land Reclamation by Singapore in and around the Straits of Johor (No.12) (Malaysia v Singapore) (Provisional Measures, Order of 8 October 2003) ITLOS Reports 2003, (2003) 126 ILR 487

Case concerning the Conservation and Sustainable Exploitation of Swordfish Stocks in the South- Eastern Pacific Ocean (Chile/European Union) (Constitution of Chamber, Order of 20 December 2000) ITLOS Reports 2000

MOX Plant Case (No.10) (Ireland v. United Kingdom) (Provisional Measures, Order of 3 December 2001) ITLOS Reports 2001, (2003) 126 ILR 310; 42 ILM 1187

Southern Bluefin Tuna Cases (No.3 & 4) (New Zealand v. Japan; Australia v. Japan)
(Provisional Measures, Order of 27 August 1999) ITLOS Reports 1999,
(2000) 117 ILR 148; 38 ILM 1624

Arbitration Cases

*Award of the Arbitral Tribunal Constituted Pursuant to Article 287, and in
accordance with Annex VII of UNCLOS in the Matter of an Arbitration
Between Guyana and Suriname*, 17 September 2007

Behring Sea Fur Seals Arbitration (1898) 1 Moore's Int Arb 755

The North Atlantic Coast Fisheries Case (Great Britain v. US) (1909) 11 RIAA 167

Trail Smelter Arbitration (US v. Canada) (1941) 3 RIAA 1907

Lac Lanoux Arbitration (France v. Spain) (1957) 24 ILR 101

Beagle Channel Arbitration (Argentina v. Chile) (1977) 52 ILR 93

Dubai/Sharjah Border Arbitration (Arbitral Award) (1981) 91 ILR 543

*Dispute Concerning Access to Information under Article 9 of the OSPAR Convention
between Ireland and the United Kingdom of Great Britain and Northern
Ireland, (Ireland v. UK)* (2003) 23 RIAA 59

*Case Concerning the Auditing of Accounts between the Kingdom of the Netherlands
and the French Republic Pursuant to the Additional Protocol of 25 September
1991 to the Convention on the Protection of the Rhine Against Pollution by
Chlorides of 3 December (Netherlands v. France)* (2004) 25 RIAA 267

Indus Waters Kishenganga Arbitration (Pakistan v. India) (Partial Award) (2013) 154
ILR 1.

The Bay of Bengal Maritime Boundary Arbitration (Bangladesh v. India) (2014) ILR

The Chagos Marine Protected Area Arbitration (Mauritius v. UK) (2015)
<<https://www.pcacases.com/web/view/11>>

Others

Baglihar Dam and Hydroelectric Plant: Expert Determination on Points of Difference Referred by the Government of Pakistan under the Provisions of the Indus Waters Treaty (2007)
<<http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1171996340255/BagliharSummary.pdf>>

Dispute concerning Responsibility for the Deaths of Letelier and Moffitt (US v. Chile)
(1992) 25 RIAA 1

Espoo Inquiry Commission, Report on the Likely Significant Adverse Transboundary Impacts of Danube-Black Sea Navigation Route at the Border of Romania and the Ukraine (2006)
<<http://www.unece.org/fileadmin/DAM/env/eia/documents/inquiry/Final%20Report%2010%20July%202006.pdf>>

Final report of the Judicial Commission of Inquiry into Allegation into Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo 2001 (May 2001-November 2002), Kampala, November 2002

In Proceedings Conducted by the Review Panel Established under Article 17 and Annex II of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean with Regard to the Objection by the Russian Federation to a Decision of the Commission of the South Pacific (Findings and Recommendations of the Review Panel) [5 July 2013] <http://archive.pca-cpa.org/showpagedf5a.html?pag_id=1520>

Jan Mayen Continental Shelf (Iceland v. Norway) (Report and Recommendations to the Government of Iceland and Norway) (1981) 62 ILR 10

The Red Crusader (Denmark v. UK) (1962) 35 ILR 485; 29 RIAA

TABLE OF INTERNATIONAL INSTRUMENTS

Treaties

- 1899** International Convention for the Pacific Settlement of International Disputes (adopted 29 July 1899, entered into force 4 September 1900) 187 CTS 410
- 1907** International Convention for the Pacific Settlement of International Disputes (adopted 18 October 1907, entered into force 26 January 1910) 205 CTS 233
- 1911** Convention between Great Britain, Japan, Russia and the United States Requesting Measures for the Preservation and Protection of Fur Seals in the North Pacific Ocean (signed 7 December 1911) (1911) 214 CTS 80
- 1935** Convention For The Final Settlement Of The Difficulties Arising Through Complaints Of Damage Done In The State Of Washington By Fumes Discharged From The Smelter Of The Consolidated Mining And Smelting Company, Trail, British Columbia, (15 April 1935) 162 LNTS 73
- 1948** American Treaty on Pacific Settlement (Pact of Bogotá) (adopted in 30 April 1948, enter into forced 6 May 1949) 30 UNTS 55
- Inter-Dominion Agreement between the Government of India and the Government of Pakistan on the Canal Water Dispute between East and West Punjab (signed 4 May 1948) 54 UNTS 45
- 1945** Charter of the United Nations and Statute of the International Court of Justice (adopted 26 June 1945, entered into force 24 October 1945), 33 UNTS XVI, 145 BSB 832
- 1946** The International Convention for the Regulation of Whaling (adopted 2 December 1946, entered into force 10 November 1948) 161 UNTS 2124
- 1949** Revised General Act for the Pacific Settlement of International Disputes (adopted 28 April 1949, entered into force 20 September 1950) 71 UNTS 101

- 1952** FAO International Plant Protection Convention (adopted 6 December 1951, entered into force 3 April 1952) 150 UNTS 67
- 1958** Agreement Relating to Lake Lanoux (with an arrangement concerning the lake's development) (signed and entered into force 12 July 1958) 796 UNTS 235
- 1959** Antarctic Treaty (adopted 1 December 1959, entered into force 23 June 1961) 402 UNTS 71
- 1960** Indus Waters Treaty (adopted 19 September 1960, entered into force 12 January 1961) 491 UNTS 126
- 1962** Protocol Instituting a Conciliation and Good offices Commission to be Responsible for Seeking the settlement of any Disputes which may Arise between States Parties to the Convention against Discrimination in Education (adopted 12 December 1962, entered into force 24 October 1968) 651 UNTS 362
- 1965** Convention on the Settlement of Investment Disputes between States and Nationals of other States (adopted 18 March 1965, entered into force 14 October 1966) 575 UNTS 159
- 1967** Treaty on Principle Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (adopted 27 January 1967, entered into force 10 October 1967) 610 UNTS 205
- 1972** Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (adopted 13 November 1972, entered into force 30 August 1975) 1046 UNTS 138
- 1973** Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (adopted 3 March 1973, entered into force 1 July 1975) 993 UNTS 243

- 1974** Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden (adopted 19 February 1974, entered into force 5 October 1976) 1902 UNTS 279, 13 ILM 511

Convention for the Prevention of Marine Pollution from Land-Based Sources (adopted 4 June 1974, entered into force 6 May 1978) 13 ILM 352; Amended by Protocol of 1986 (done 26 March 1986, entered into force 1 February 1990) 27 ILM 625

- 1976** Convention on the Protection of the Rhine Against Pollution by Chlorides (adopted 3 December 1976, entered into force 1 February 1979) 1404 UNTS 59, 16 ILM 242

- 1977** Treaty of 16 September 1977 Concerning the Construction and Operation of the Gabčíkovo-Nagymaros System of Locks (Czechoslovakia-Hungary) (16 September 1977) 1109 UNTS 235

- 1978** Rules of Court (adopted 14 April 1978, entered into force 1 July 1978, amendment entered into force 14 April 2005)

Convention in Future Multilateral Cooperation in the Northwest Atlantic Fisheries (NAFO Convention) (adopted 24 October 1978, entered into force 1 January 1979) 1135 UNTS 369

- 1979** Convention on Long-Range Transboundary Air Pollution (LRTAP)(adopted 13 November 1979, entered into force 16 March 1983) 1302 UNTS 217

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (adopted 5 December 1979, entered into force 11 July 1984) 1363 UNTS 3

Convention on the Conservation of European Wildlife and Natural Habitats (adopted 19 September 1979, entered into force 1 June 1982) 1284 UNTS 209

1980 Convention on the Conservation of Antarctic Marine Living Resources (adopted 20 May 1980, entered into force 7 April 1982) 1329 UNTS 47

Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries (NEAFC Convention) (adopted 18 November 1980, entered into force 17 March 1982) 1285 UNTS 129

Agreement between Norway and Iceland on Fishery and Continental Shelf Questions (adopted 28 May 1980, entered into force 13 June 1980) 2124 UNTS 225

1982 United Nations Convention on the Law of the Sea (UNCLOS) (10 December 1982, entered into force 16 November 1994) 1833 UNTS 3, (1982) 21 ILM 1261

1985 Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at Least 30 Per Cent (adopted 8 July 1985, entered into force 2 September 1987) 1480 UNTS 215

Vienna Convention for the Protection of the Ozone Layer (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTS 293, 26 ILM 1529

1987 Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol) (adopted 16 September 1987, entered into force 1 January 1989) 1522 UNTS 3

1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)(done 22 March 1989, entered into force 5 May 1992) 1673 UNTS 57

1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) (adopted 25 February 1991, entered into force 10 September 1997) 1989 UNTS 309

1992 United Nations Framework Convention on Climate Change (UNFCCC),
(adopted 9 May 1992, entered into force 24 March 1994) 1771 UNTS
107

Convention on Biological Diversity (CBD) (adopted 5 June 1992, entered into
force 29 December 1993) 1760 UNTS 79

North American Free Trade Agreement (adopted 17 December 1992, entered
into force 1 January 1994) 32 ILM 289

Convention on the Protection and Use of Transboundary Watercourses and
International Lakes, (adopted 17 March 1992, entered into force 6
October 1996) 1936 UNTS 269

Convention for the Protection of the Marine Environment of the North-East
Atlantic (adopted 22 September 1992, entered into force 25 March 1998)
(1993) 2354 UNTS 67, 32 ILM 1068

Convention on the Protection of the Marine Environment of the Baltic Sea
Area (adopted 9 April 1992, entered into force 17 January 2000) 2099 UNTS
197

1993 Convention on the Conservation of Southern Bluefin Tuna (adopted 10 May
1993, entered into force 30 May 1994) 1819 UNTS 360

Agreement between Australia and the Republic of Nauru for the Settlement of
the Case in the International Court of Justice Concerning Certain Phosphate
Lands in Nauru (adopted 10 August 1993, entered into force 20 August 1993)
1770 UNTS 379, 32 ILM 1474

1994 Convention to Combat Desertification in Countries Experiencing Serious
Drought and/or Desertification, Particularly in Africa (adopted 17 June 1994,
entered into force 26 December 1996) 1954 UNTS 3

- 1995** Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (adopted 4 August 1995, entered into force 11 December 2001) 2167 UNTS 3

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention) (adopted 10 June 1995, entered into force 9 July 2004) UNEP (OCA)/MED IG.6/7, <<http://www.unepmap.org/index.php?module=content2&catid=001001004>>

Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (adopted and entered into force 5 April 1995,) 2069 UNTS 3, 34 ILM 864

- 1996** Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter (adopted 7 November 1996, entered into force 24 March 2006) 36 ILM 1

- 1997** Convention on the Law of the Non-navigational Uses of International Watercourses (Watercourses Convention) (adopted 21 May 1997, entered into force 17 August 2014) 36 ILM 700

Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol) (11 December 1997, entered into force 16 February 2005) 2303 UNTS 148, 37 ILM 22

- 1998** Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention) (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 450.
Convention on the Cooperation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins (adopted 20 November 1998, entered into force 31 June 2000)

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (done 10 September 1998, entered into force 24 February 2004) 2244 UNTS 337

1999 Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted 17 June 1999, entered into force 4 August 2005) 2331 UNTS 202, 38 ILM 1708

2000 Cartagena Protocol on Biosafety to the CBD (Cartagena Protocol)(done 29 January 2000, entered into force 11 September 2003) 2226 UNTS 208

Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention) (adopted 5 September 2000, entered into force 19 June 2004) 2275 UNTS 43

2001 Stockholm Convention on Persistent Organic Pollutants (POPs) (adopted 22 May 2001, entered into force 17 May 2004) 2256 UNTS 119, 40 ILM 532

2003 Protocol on Strategic Environmental Assessment to the Espoo Convention (SEA Protocol) (adopted 21 May 2003, not yet entered into force)

<http://www.unece.org/fileadmin/DAM/env/eia/documents/legaltexts/protocol_english.pdf>

Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention (Kiev Protocol) (adopted 21 May 2003, entered into force 8 October 2009) UN Doc. MP.PP/2003/1, 2629 UNTS 119

African Convention on the Conservation of Nature and Natural Resources (adopted 11 July 2003, not yet in force)

2004 International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) (signed 3 November 2001, entered into force 31 March 2004), 2400 UNTS 303

2005 *Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v Singapore)*—Settlement Agreement (with map) (entered into force 26 April 2005) 2324 UNTS 23

2009 Rules of the ITLOS, ITLOS/8 (17 March 2009) (adopted 27 April 2005) 1978 Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (SPRFMO Convention) (adopted 14 November 2009, entered into force 24 August 2012) [2012] ATS 28

Declarations

Declaration of Argentina which declared that the award was null and void in Argentina—Chile: Exchange of Diplomatic Notes concerning the Beagle Channel Arbitration, (1978) 17 ILM 738.

Argentina—Chile: Negotiation and Conclusion of Border Dispute Agreement, (1985) 24 ILM 1

United Nations Resolutions

United Nations Conference on the Environment and Development: Rio Declaration on the Environment and Development (adopted at Rio de Janeiro, June 14, 1992), UN Doc A/CONF.151/26 (Vol I) (1992); 31 ILM 874

Declaration of the United Nations Conference on the Human Environment (adopted at Stockholm, June, 1972) UN Doc.A/CONF/48/14/REV.1, 11 ILM 1416

UNGA ‘United Nations Model Rules for the Conciliation of Disputes Between States’ (adopted by the GA on the Report of the Sixth Committee (A/50/642 and Corr.1) 29 January 1996) UN Doc A/RES/50/50

Draft Articles on Prevention of Transboundary Harm from Hazardous Activities 2001, ILC, ‘Report of International Law Commission on the Work of its 53rd Session’ (23 April-1 June and 2 July-10 August 2001) UN Doc A/56/10; Ybk ILC, Vol 2, Part 2, A/CN.4/SER.A/2001/Add.1 (Part 2)

Draft Articles on Responsibility of States for Internationally Wrongful Acts 2001, ILC, 'Report of International Law Commission on the Work of its 53rd Session' (23 April-1 June and 2 July-10 August 2001) UN Doc A/56/10; Ybk ILC, Vol 2, Part 2, A/CN.4/SER.A/2001/Add.1 (Part 2)

Others

PCA Optional Rules for Arbitration of Disputes Relating to the Environment and/or Natural Resources (adopted 19 June 2001) Electronic version available at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-Arbitration-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf>

PCA Optional Rules for Conciliation of Disputes Relating to the Environment and/or Natural Resources (2002) Electronic version available at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-Conciliation-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf>

UNCITRAL Arbitral Rules, A/RES/65/22, 15 ILM 701, Electronic version available at <<https://www.uncitral.org/pdf/english/texts/arbitration/arb-rules-revised/arb-rules-revised-2010-e.pdf>>

UNCITRAL Conciliation Rules, A/RES/35/52, 20 ILM 300, Electronic version available at <<http://www.uncitral.org/pdf/english/texts/arbitration/conc-rules/conc-rules-e.pdf>>

LIST OF ABBREVIATIONS

AALCO J Int'l L	Asian-African Legal Consultative Organization Journal of International Law
ADRJ	Australian Dispute Resolution Journal
AE	Annuaire Européen
AFDI	Annuaire Français de Droit International
AI	Arbitration International
AIDI	Annuaire de l'Institut de Droit International
APJEL	Asia Pacific Journal of Environmental Law
AJIL	American Journal of International Law
Australian J Int'l Aff.	Australian Journal of International Affairs
Australian Ybk Intl L	Australian Yearbook of International Law
British Ybk Intl L	British Yearbook of International Law
Cal L Rev	California Law Review
Can-US LJ	Canada-United States Law Journal
Canadian Ybk Intl L	Canadian Yearbook of International Law
Chi J Int'l L	Chinese Journal of International Law
CL	Climate Law
CLJ	Cambridge Law Journal
CTS	Consolidated Treaty Series
CUP	Cambridge University Press
Denv.J.Int'l L.& Pol'y	Denver Journal of International Law and Policy
Emory J Int'l DispRes	Emory Journal of International Dispute Resolution
Env L Rev	Environmental Law Review
ELM	Environmental Law and Management
ELQ	Ecology Law Quarterly
EPW	Economic & Political Weekly
Geo.Int'l Envtl.L.Rev.	Georgetown International Environmental Law Review
Geo.Wash.J.Int'l L.& Econ.	George Washington Journal of International Law and Economic

Finnish Ybk Intl L	Finnish Yearbook of International Law
German Ybk Intl L	German Yearbook of International Law
Hague Ybk Intl L	Hague Yearbook of International Law
EJIL	European Journal of International Law
EPL	Environmental Policy and Law
IA	International Affairs
ICJ	International Court of Justice
ICLQ	International and Comparative Law Quarterly
ICSID	International Centre for the Settlement of International Disputes
IJMCL	International Journal of Marine and Coastal Law
ILM	International Legal Materials
ILR	International Law Report
ISQ	International Studies Quarterly
IUCN	International Union for Conservation of Nature
Indian Ybk IntAff	Indian Yearbook of International Affairs
Italian Ybk Intl L	Italian Yearbook of International Law
Japanese Ybk Intl L	Japanese Yearbook of International Law
JCR	Journal of Conflict Resolution
JEL	Journal of Environmental Law
J Environ Stud Sci	Journal of Environmental Studies and Sciences
JHIL	Journal of the History of International Law
JIDS	Journal of International Dispute Settlement
JIWLP	Journal of International Wildlife Law and Policy
JL & Soc' y	Journal of Law and Society
J Int'l Aff	Journal of International Affairs
JWL	Journal of Water Law
L.& Soc'y Rev.	Law & Society Review
LJIL	Leiden Journal of International Law
LS	Legal Studies
MP	Marine Policy
Max Planck UNYB	Max Planck Yearbook of United Nations Law
Naval War Coll Rev	Naval War College Review
New Zealand Ybk Intl L	New Zealand Yearbook of International Law

Nordic JIL	Nordic Journal of International Law
NTIR	Netherlands International Law Review
NJ	Negotiation Journal
NYU J Int'l L & Pol	New York University Journal of International Law and Politics
Or L Rev	Oregon Law Review
OUP	Oxford University Press
PH	Pakistan Horizon
PNAS	Proceedings of the National Academy of Sciences
PCA	Permanent Court of Arbitration
PCS	Peace and Conflict Studies
PCIJ	Permanent Court of International Justice
QIL	Questions of International Law
RADIC	Revue Africaine de Droit International et Comparé
RBDI	Revue Belge de Droit International
RECIEL	Review of European Community and International Environmental Law
RGDIP	Revue Générale de Droit International Public
RHDI	Revue Hellenique de Droit International
RIAA	Reports of International Arbitral Awards
RSDIE	Revue Suisse de Droit International et de Droit Européen
SCJ	Supreme Court Journal
Stan J Int'l L	Stanford Journal of International Law
TEL	Transnational Environmental Law
UNCLOS	The 1982 United Nations Convention on the Law of the Sea
UNTS	United Nations Treaty Series
U Pa L Rev	University of Pennsylvania Law Review
U. Pa. J. Int'l L.	University of Pennsylvania Journal of International Law
Vand J Transnat'l L	Vanderbilt Journal of Transnational Law

WI	Water International
WP	Water Policy
Yale LJ	Yale Law Journal
YbILC	Yearbook of International Law Commission
YEEL	Yearbook of European Environmental Law
YIEL	Yearbook of International Environmental Law
ZAÖRV	Zeitschrift für Ausländisches Öffentliches Recht und Völkerrecht

CHAPTER 1

INTRODUCTION

1. THE REASONS FOR THIS STUDY

Disputes are a fact of life and an inevitable feature in any community, including the international community, and that means that international environmental law is no different from any other area of international law in this respect. There have been numerous environmental disputes in the past and we should not expect that situation to change radically in the future. So, while not forgetting about trying to develop more effective dispute avoidance mechanisms, such as the exchange of environmental information and prior consultation, it is important to have the most suitable and effective mechanisms available for trying to settle environmental disputes.¹ International environmental disputes frequently have characteristics that distinguish them from other kinds of international disputes,² and that this raises questions about the suitability and effectiveness of the existing dispute mechanisms, especially the traditional mechanisms, both judicial and non-judicial, listed in Article 33 (1) of the United Nations Charter (UN Charter).³

Such characteristics of international environmental disputes include the following (though by no means all environmental disputes have all or any of these characteristics).⁴ Firstly, a dispute may be bilateral or multilateral in character. Bilateral environmental disputes involve two States, arising often between neighbouring States, which is a characteristic that can be found in most cases which are brought before dispute settlement mechanisms. Multilateral environmental disputes involve more than two States arguing with regard to the protection of the environment. It may be the case that a multilateral environmental dispute arises from

¹ The meaning of the words suitable and effective in this context will be explained in a later chapter.

² Richard Bilder, 'The Settlement of Disputes in the Field of the International Law of the Environment' (1975) 144 *Recueil des Cours* 139, 154-155. Stephens notes that 'many inter-state disputes relating to environmental protection are distinctive' see Tim Stephens, 'Principle 26: International Environmental Dispute Settlement' in Jorge E. Viñuales (ed), *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015) 615.

³ Article 33 (1) lists the means of resolution: 'negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice'.

⁴ They will be explored in more detail in chapter 2.

the fact that the environmental obligations that were breached were owed to the international community as a whole (*erga omnes* obligations) or to all the treaty parties to a multilateral convention, not to any specific States (*erga omnes partes* obligations). In this sense, the dispute is not between two States any more, since it involves a number of States.

Secondly, international environmental disputes frequently have a multi-dimensional character which includes the complexity of the scientific or technical information associated with a dispute and the complexity of questions relating to social, economic and political choice. In the first case, the situation may be that applicants and respondents support their arguments with scientific and empirical data to prove the occurrence or non-occurrence of environmental damage. In the second case, the environmental disputes concern not only the legal aspects but often revolve around multiple issues such as economic, political and social aspects.

Thirdly, international environmental disputes may entail difficulties in identifying the source of the alleged breach of an international environmental obligation. This is the case, for example, where a State which is suffering from transboundary pollution cannot identify, or provide clear and convincing evidence of, the State(s) responsible.

Fourthly, international environmental disputes may involve complex questions of quantifying damages. The case may be more complex if the applicant requests the respondent to provide monetary compensation for damage caused to the environment due to the lack of criteria to be used in calculating environmental damage that may be serious or irreversible.

Lastly, international environmental disputes may involve the interpretation and application of procedural obligations. International environmental obligations of a procedural character, such as the obligation to notify other States of the risk of significant transboundary harm and the obligation to conduct an environmental impact assessment (EIA), are very important to environmental regimes and are at the heart of many shared resources treaties in the sense that they could minimise or prevent the likelihood that transboundary harm would occur. It is likely that the States which have suffered environmental damage may have a dispute with other States claiming the latter's failure to perform such obligations.

The questions that may be asked are: Given that there are a wide variety of dispute settlement mechanisms existing in international law, which mechanism can

provide for suitable and effective processes or rules of procedure that could facilitate the resolution of international environmental disputes that have the aforementioned characteristics? Klein stresses that ‘it is important to appreciate the diversity of methods available to resolve international environmental law disputes and their potential to be tailored to the specific issues and circumstances involved’.⁵ Therefore, a dispute settlement mechanism that can accommodate such distinctive features is needed so as to resolve such disputes.

This introductory chapter is aimed at: firstly, formulating the research hypothesis, the research questions and the scope of this thesis; secondly, explaining the research methodology that will be employed; thirdly, clarifying the originality that the thesis would display by constituting a contribution to knowledge; and, lastly, outlining the overall structure of the thesis.

2. RESEARCH HYPOTHESIS, RESEARCH QUESTIONS AND SCOPE OF THE STUDY

2.1 Research Hypothesis and Research Questions

The premise upon which this thesis is based is that:

Given the characteristics of international environmental disputes, not all existing dispute settlement mechanisms available in international law are equipped with appropriate structural arrangements, processes and rules of procedure that are suitable and effective for settling international environmental disputes. While some mechanisms may be suitable and effective for settling a dispute which has certain characteristics, others may not be.

This study sets up the main research questions as follows: Given the characteristics of international environmental disputes, how suitable and effective are existing dispute settlement mechanisms? and, to the extent that they are not, what changes might be made?

In order to answer the main research questions, some sub-questions are asked as follows:

(1) What is meant by an international environmental dispute and what are its characteristics? The objective of asking this research question is to set the scope of

⁵ Natalie Klein, ‘Settlement of International Environmental Law Disputes’ in Malgosia Fitzmaurice, David M. Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010) 395.

the thesis, namely the cases discussed in the thesis will be those that fall within the scope of international environmental disputes. In addition, the characteristics of international environmental disputes are the most important issue that needs to be identified, since they will be used as a basis for the analysis of the suitability of each of the dispute settlement mechanisms that are available in international law.

(2) Are the dispute settlement mechanisms that are available in international law suitable for settling an international environmental dispute, taking into account its characteristics? The reason why this research question is framed in this way is because the thesis attempts to find suitable means by examining the nature of each dispute settlement mechanism and making an evaluation in order to find out how each mechanism can provide processes or procedures that correspond to the special characteristics of environmental disputes.

(3) Are the dispute settlement mechanisms effective in settling international environmental disputes according to the criteria used for evaluating effectiveness? Criteria of effectiveness will be established in order to appraise each mechanism.

(4) How can the shortcomings for resolving international environmental disputes that have been exposed in dispute settlement mechanisms be addressed? After examining the suitability and effectiveness of each mechanism, one might, presumably, find that some mechanisms have drawbacks in settling this kind of dispute.

2.2 The Scope of the Thesis

With regard to the scope of the thesis, only the third-party dispute settlement mechanisms are the object of this study. For non-judicial means, this covers mediation, conciliation and inquiries. For judicial means, this includes the International Court of Justice (ICJ), the International Tribunal for the Law of the Sea (ITLOS) and the arbitral tribunals. However, it will not include the cases brought before the Permanent Court of International Justice (PCIJ), since the essence of those cases had little relevance to international environmental law.⁶ The Non-Compliance Procedures (NCPs) of Multilateral Environmental Agreements (MEAs) and RFMO

⁶ These two cases are *Case Relating to the Territorial Jurisdiction of the International Commission of the River Order (Great Britain, Czechoslovakia, Denmark, France, Germany, and Sweden v. Poland)* (Judgment) PCIJ Rep Series A No 23 and *Diversion of Water from the Meuse (Netherlands v. Belgium)* PCIJ Rep Series A/B No. 70.

panels established pursuant to the treaties of the Regional Fisheries Management Organisations (RFMO panels), which deal with specific kinds of dispute, are also studied. It should be noted from the outset that NCPs were not primarily designed as a dispute settlement mechanism. The more informal means of settling RFMO disputes have been developed precisely to avoid some of the shortcomings of the traditional means. However, the Dispute Settlement Understanding of the World Trade Organisation (WTO) will not be studied. The main reason is that while some WTO disputes have raised environmental issues, such disputes are predominantly addressed and resolved with reference to international trade law rather than environmental law.

With regard to disputants, the research is confined to studying disputes that arise between States. A dispute between non-State actors on the one hand and States on the other—such as those cases brought before NCPs which are triggered by individuals or by Non-Governmental Organisations (NGOs), as well as cases which were decided by human rights judicial bodies concerning environmental issues in the human rights context, such as the European Court of Human Rights (ECHR), the African Commission on Human and People's Rights (ACHPR)—fall outside the scope of this study.

3. RESEARCH METHODOLOGY

As far as the research methodology is concerned, the approach that this thesis will adopt in order to answer the research questions is the positivist tradition of international law or doctrinal legal research which includes the analysis of legal texts and the output of international courts and tribunals as well as the recommendations of non-judicial bodies. The study is desk based. The author has not attempted to interview those who have been involved in environmental disputes (such as government officials and legal practitioners) nor has he sent questionnaires to such people. This is because of the lack of the necessary resources to do so, the difficulty of identifying a suitably representative group of people to interview/question and the traditional low response rate to questionnaires sent out by students.

The methodology that will be adopted to answer the research question about the characteristics of international environmental disputes is based on the observation and review of a number of actual cases brought before dispute settlement bodies. In addition, the thesis will demonstrate the characteristics which are theoretically possible.

The study of the issues of suitability and effectiveness is based largely on a theoretical rather than an empirical approach. This approach has been adopted for various reasons. There have probably been enough examples of the use of judicial means, and these examples are publicly accessible, so that an empirical study of judicial means would be and has been to some degree possible. The use of mediation is often not publicised and there has been only a limited amount of practice, so it is simply impossible to make an empirical study of mediation; and while inquiries and conciliation are usually more publicised, there have been very few examples of such means being utilised to settle international environmental disputes. The same is true of informal RFMO means. Thus, in these cases an empirical study is out of the question. The position with regard to NCPs is different. While for some MEAs, there has been extensive use of NCPs, this has often not been in a situation that could be characterised as a dispute.

In order to answer the question of how suitable the existing dispute settlement mechanisms are, each characteristics of international environmental disputes will be tested by comparing them with the inherent nature of each dispute settlement mechanism. Their inherent nature will include the structural arrangement of those mechanisms, such as statutes or rules of international courts, so that this will answer the question of which mechanisms are suitable for which characteristics of environmental disputes.

When dealing with the question of how effective the existing dispute settlement mechanisms are, this question is answered by using a theoretical approach. The criteria of effectiveness will be established first to provide as the framework for the analysis. In order to lay down these criteria, different theories will be selected from the literature in various disciplines, for example, the social sciences, international relations and international law. The methodology that will be used in this section will be a case-based analysis. All international environmental cases that have been brought before international courts and non-judicial means that have been used in the past will be examined.

The material for research is drawn also from the judgments of all the fora that fall within the scope of this study, such as the judgments rendered by the ICJ, the ITLOS and the arbitral tribunals with a view to providing clear illustrations of these environmental matters. The research will also take into account the practices of non-judicial bodies relating to environmental dispute resolution such as the

recommendations issued by inquiry commissions. All of the judgments, awards and recommendations considered are limited to those which was rendered up to the end of 2015.

4. ORIGINAL CONTRIBUTIONS

The existing literature has focused on those issues concerning the international courts and tribunals as well as arbitration that are related to environmental protection and this leaves room for studies of other means of dispute settlement.⁷ Thus, the classic study by Richard Bilder focuses almost exclusively on judicial means and says little about third-party diplomatic means.⁸ There are also items in the literature which discuss the issue of the role of the international courts in protecting the environment but they have failed to address the question of how the other means of dispute settlement could be used.⁹ Although the book by Tim Stephens thoroughly examined the challenges of adjudicating environmental disputes, he did not offer concrete solutions showing how diplomatic means could work together with judicial means.¹⁰ Moreover, even though some of the literature deals with diplomatic and adjudicative means of dispute settlement, the relationships between all those different types of dispute settlement have not yet been analysed and, still, diplomatic means have not received a great deal of attention.¹¹

⁷ Tim Stephens, *International Courts and Environmental Protection* (CUP 2009).

⁸ Bilder (n 2) 145.

⁹ For example, Malgosia Fitzmaurice, 'Equipping the Court to Deal with Developing Areas of International Law: Environmental Law' in Connie Peck and Roy S. Lee (eds), *Increasing the Effectiveness of the International Court of Justice: Proceedings of the ICJ/UNITAR Colloquium to Celebrate the 50th Anniversary of the Court* (Martinus Nijhoff Publishers 1997) 397-444; Phoebe N. Okowa, 'Environmental Dispute Settlement: Some Reflections on Recent Developments' in Malcolm D. Evans (ed), *Remedies in International Law: The Institutional Dilemma* (Oxford Hart 1998) 157-172; Malgosia Fitzmaurice, 'The International Court of Justice and Environmental Disputes' in Duncan French, Matthew Saul and Nigel D. White (eds), *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010) 17-56; Ilias Plakokefalos, 'International Courts and Tribunals and the Implementation of International Environmental Law' in Sandrine Maljean-Dubois and Lavanya Rajamani (eds), *La mise en oeuvre du droit international de l'environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011) 471-514.

¹⁰ Stephens, *International Courts and Environmental Protection* (n 7) 345-365.

¹¹ Cesare P.R. Romano, *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach* (The Hague Kluwer Law International 2000); Duncan French, 'Environmental Dispute Settlement: The First (Hesitant) Signs of Spring?' (2006) 19 *Hague Ybk Intl L* 3, 3-32; Cesare P.R. Romano, 'International Dispute Settlement' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007) 1036-1056; Klein (n 5) 379-400; Tim Stephens, 'The Settlement of Disputes in International Environmental Law' in Shawkat Alam and others (eds), *Routledge Handbook of International Environmental Law* (Routledge 2012) 175-187; José Juste-Ruiz, 'The International Court of Justice and International Environmental Law' in Nerina Boschiero and others (eds), *International Courts and the Development of International Law:*

This thesis also differs from most of the existing literature by its systematic focus on the characteristics of international environmental disputes. Other studies did not deal with suitability and effectiveness in the way that this thesis going to study. It will provide an analysis of the use, suitability and effectiveness of third-party non-judicial mechanisms that include mediation, conciliation and inquiries in settling environmental disputes. In addition, NCPs and RFMO panels will also be studied. While the former have been extensively discussed, the latter have never been studied before. Not only are there interesting rules of procedure of the RFMO panels that are worthwhile to learn about but also there has recently been a case which illustrates their operation in practice.

This thesis attempts to provide guidance for practitioners on the various options for settling an environmental dispute. It is like a toolbox that, when it is opened, one will find a wide range of tools within it. In order to choose the most suitable one to fix a broken appliance, one needs to know the function of each of the tools. Likewise, in order to restore broken relationships, States also need to opt for suitable mechanisms. Should States decide to settle disputes by using a particular mechanism, they will have a better understanding of what are the benefits that they will gain and the key challenges or obstacles that they will have to face. Realising the benefits and drawbacks would certainly help them to choose the right forum which will suit an international environmental dispute having special characteristics and which will suit their own preferences: for example, in a case where the parties are concerned with the societal choice, mediation or conciliation, considering their dispute settlement process, will probably be the right choice.

In addition, this thesis proposes some recommendations that would have a chance of being carried out in practice in order to address problems or drawbacks that appear to be an obstacle to the better resolution of international environmental disputes.

5. THE STRUCTURE OF THE THESIS

This study consists of seven chapters. Following this chapter, chapter 2, 'The Nature of International Environmental Disputes', provides a working definition of international environmental disputes which will be used throughout the thesis. Also,

Essays in Honour of Tullio Treves (T.M.C. Asser Press 2013) 383-402; Stephens, 'Principle 26: International Environmental Dispute Settlement' 599-616.

the special characteristics of international environmental disputes will be explained so that this paves the way to the later chapters, notably chapter 4, where the issue of the suitability of particular dispute settlement mechanisms will be discussed on the basis of such special characteristics. Thus, in this chapter, research sub-questions (1) will then be answered.

Chapter 3, 'Dispute Settlement and International Environmental Law', examines the nature of the available dispute settlements mechanisms in international law. It also briefly discusses the environmentally related cases that have been brought before each mechanism in order to give an overview of the actual practice in this field.

Chapter 4, 'A Comprehensive Appraisal of the Suitability of Dispute Settlement Mechanisms in Settling International Environmental Disputes', analyses the suitability of each mechanism by using the special characteristics explained in chapter 2 as the basis of the analysis. This chapter will conclude by showing which mechanisms are suitable for settling environmental disputes and which are not. This chapter will provide answers to research sub-questions (2).

Chapter 5, 'Assessing the Effectiveness of Dispute Settlement Mechanisms in Settling International Environmental Disputes', is divided into two main parts. The criteria for assessing effectiveness will be introduced in the first part before applying such criteria with a view to finding out which mechanisms can settle disputes most effectively. In this chapter, sub-research questions (3) will be answered

Chapter 6, 'Proposals for Improving International Environmental Dispute Settlements', seeks to propose some ways in which the shortcomings of each of the mechanisms identified in the previous chapters, notably chapters 4 and 5, could be improved. These proposals will be ones that could be implemented rather than making far-reaching proposals which have little or no chance of being adopted. This chapter will provide answers to research sub-questions (4).

Chapter 7, 'Conclusions', summarises the answers to all the research questions raised by this thesis and provides some observations with regard to the selection of appropriate means for settling international environmental disputes.

CHAPTER 2

THE NATURE OF INTERNATIONAL ENVIRONMENTAL DISPUTES

INTRODUCTION

International environmental disputes have characteristics that raise questions as to the capacity of traditional dispute settlement mechanisms to resolve international environmental disputes. This chapter is concerned with identifying those characteristics, but before doing that what is needed is to define what is meant by a dispute in international law and specifically what is meant by an international environmental dispute.

This chapter is therefore divided into three sections: the notion of dispute in international law, a clarification of the term *international environmental dispute* and the characteristics of international environmental disputes.

1. THE NOTION OF INTERNATIONAL DISPUTE IN INTERNATIONAL LAW

Generally, it can be clearly seen that dispute-settlement clauses have been included in almost all MEAs.¹ Obviously, the key concept is the word *dispute*. What do we mean by dispute? Does it have a specific meaning in international law?

The purpose of this section is to examine the meaning of dispute in international law by surveying the jurisprudence of international dispute settlement bodies which has been laid down from the time of the PCIJ to the era of the ICJ. It should be noted, however, from the outset that such explanations given by the courts were closely linked to the issue of jurisdiction. That is to say, the jurisdiction of

¹ For example, Art. 18 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973, entered into force 1 July 1975) 993 UNTS 243 (hereinafter CITES); Art. 13 of the Convention on Long-range Transboundary Air Pollution (adopted 13 November 1979, entered into force 16 March 1983) 1302 UNTS 217 (hereinafter LRTAP); Art. 27 of the Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79 (hereinafter CBD); Art. 14 of the United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 24 March 1994) 1771 UNTS 107 (hereinafter UNFCCC); Art. 33 of the Convention on the Law of the Non-navigational Uses of International Watercourses (adopted 21 May 1997, entered into force 17 August 2014) 36 ILM 700 (hereinafter Watercourses Convention); Art. 16 of the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 450 (hereinafter Aarhus Convention).

international judicial institutions hinges on the pre-existence of a dispute.² Consequently, the definition of dispute established by international judicial institutions is quite strict, in the sense that a disagreement or conflict between States should only be qualified as a ‘dispute’ in cases which may be appropriate for resolution by certain recognised ‘judicial methods of dispute settlement’.³ As the ICJ in the *Nuclear Tests* case held: ‘The existence of a dispute is the primary condition for the Court to exercise its judicial function’.⁴ Although the understanding of the term ‘dispute’ is vital for determining a jurisdiction of the Court, no definition of dispute can be found in its own Statute.

1.1 A Landmark Ruling: The *Mavrommatis* Case

It was not until the twentieth century that the Court began to formulate the concept of dispute. In connection with the meaning of disputes, the ICJ or other tribunals always refer back to the classic exposition established by the PCIJ in 1924, in the celebrated *Mavrommatis* case, in which the Court had to ascertain its jurisdiction to adjudicate the matter. The PCIJ analyses the term ‘dispute’, which is one of the preliminary conditions for the Court to exercise its jurisdiction, and then the Court states that:

‘A dispute is *a disagreement* on a point of law or fact, *a conflict* of legal views or of interests between two persons.’⁵

When examining the judgment rendered by the PCIJ, it can be clearly seen from the above dictum that the Court focused on the nature and components of a dispute.⁶ But the definition was quite succinct and it did not give any additional information with regard to the concept of dispute. The Court took only a lexical interpretation of the

² See Art. 36 (2) of the Statute of the International Court of Justice, Charter of the United Nations and Statute of the International Court of Justice (adopted 26 June 1945, entered into force 24 October 1945), 33 UNTS XVI, 145 BSB 832 (hereinafter ICJ Statute).

³ See Richard B. Bilder, ‘An Overview of International Dispute Settlement’ (1986-1987) 3 Emory JInt'l DispRes 1, 4.

⁴ *Nuclear Tests Case (New Zealand v. France)* (Judgment) [1974] ICJ Rep 457, para. 55 (hereinafter the 1974 *Nuclear Tests* case). See also Shabtai Rosenne and Yaël Ronen, *The Law and Practice of the International Court, 1920-2005* (4 edn, Martinus Nijhoff Publishers 2006).

⁵ *The Mavrommatis Palestine Concessions (Greece v. United Kingdom)* (Judgment) PCIJ Rep Series A No 2, 11 (hereinafter *Mavrommatis* case) (emphasis added).

⁶ Georges Abi-Saab, *Les Exceptions Préliminaires Dans la Procédure de la Cour Internationale, Étude des Notions Fondamentales de Procédure et des Moyens de Leur Mise en Oeuvre* (A. Pedone 1967) 121.

meaning of dispute without taking into account the function which the concept of dispute should perform.⁷

Although this judicial pronouncement has been criticized for being flawed⁸ and although it raises complex theoretical problems, it was expressly adopted on a number of occasions by the Court and by arbitral tribunals, like the PCIJ,⁹ ICJ,¹⁰ the ITLOS,¹¹ when they had to consider the preliminary question of the Court's and the tribunal's jurisdiction to adjudicate the matter which is brought before them.

1.2 The Constitutive Elements of Disputes: The Development of International Jurisprudence after the *Mavrommatis* case

After the *Mavrommatis* case, the Court developed some constitutive elements of disputes. In the *Peace Treaties* case, the Court added that a dispute arises if 'the two sides hold clearly opposite views concerning the question of the performance or non-performance of certain' international obligations.¹² The criterion was sharpened by the ICJ in which it viewed that the claim made by one party must be positively opposed by the other. This was developed by the Court in the *South West Africa* case.¹³ In this case, South West Africa contended that the conflict or disagreement

⁷ Antonio Cassese, 'The Concept of 'Legal Dispute' in the Jurisprudence of the International Court' (1975) 14 *Communication e Studi* 173, 180.

⁸ Gerhard Hafner criticizes this classical definition on the grounds that it is too wide and too narrow at the same time. It is too wide because 'a mere divergence of views or interests as such, without any likelihood of follow-up action by States, is not viewed as sufficient to be submitted to international proceedings' It is too narrow because 'it is no longer possible to confine international disputes only to those between two or more States disagreeing among themselves', see Gerhard Hafner, 'The Physiognomy of Disputes and the Appropriate Means to Resolve Them' in The United Nation (ed), *International Law as a Language for International Relations* (Kluwer International Law 1996) 560.

⁹ *Case concerning Certain German Interests in Polish Upper Silesia (Germany v. Poland)* PCIJ Rep Series A. No.6, 14 (hereinafter *Polish Upper Silesia* case); *Interpretation of the Judgments Nos. 7 and 8* PCIJ Rep Series A. No.13, 10-11 (hereinafter *Interpretation of the Judgments Nos. 7 and 8* case).

¹⁰ *South West Africa (Ethiopia v. South Africa; Liberia v. South Africa)* (Preliminary Objections) [1962] ICJ Rep 319, 328 and 343 (hereinafter *South West Africa* case) and *Case Concerning Application of the International Convention on the Elimination of All Forms of Racial Discrimination (Georgia v. Russian Federation)* (Preliminary Objections) [2011] ICJ Rep 70, para. 30 (hereinafter *Georgia v. Russian Federation* case).

¹¹ *Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan)* (Provisional Measures, Order of 27 August 1999) ITLOS Reports 1999, para. 44 (hereinafter *Southern Bluefin Tuna* cases).

¹² *Interpretation of the Peace Treaties with Bulgaria, Hungary and Romania (First Phrase)* (Advisory Opinion) [1950] ICJ Rep 65, 74. See also the *Alleged Violation of Sovereign Rights and Maritime Spaces in the Caribbean Sea (Nicaragua v. Colombia)* (Preliminary Objections) [2016] ICJ Rep, para. 50.

¹³ This case was about Ethiopia and Liberia alleged against South Africa that it had violated Art. 22 of the Covenant of the League of Nations and Art. 22 of the Mandate, since it practiced apartheid, which is contrary to such international obligations see *South West Africa* case, 323.

that was alleged to exist was not a dispute of the kind envisaged in Article 7 of the Mandate.¹⁴ The Court opined that it was necessary to decide the question relating to the existence of the dispute. After citing the classic definition of a dispute given by the PCIJ, the Court held that:

‘[i]t is not sufficient for one party to a contentious case to assert that a dispute exists with the other party...It must be shown that *the claim of one party is positively opposed by the other*.’¹⁵

Positive opposition means that the complaints formulated by one party against the other are in opposition or are denied by the other party.¹⁶ This can be determined by considering the attitudes of the parties. The evidence of opposing attitudes can be found in the position of the parties in the course of consultation,¹⁷ diplomatic exchanges or official letters communicated between the organs of the parties which demonstrate a clear difference of view.¹⁸

The terms ‘dispute’ and ‘difference of opinion’ have different meanings.¹⁹ A dispute is a situation which contains an element of disagreement or conflict.²⁰ Nevertheless, a dispute is not a general disagreement, but the term dispute should be understood as referring to a ‘certain’ or a ‘specific’ type of disagreement related to a reasonably well-defined subject matter of conflict between States²¹ not merely a

¹⁴ Art. 7 of the Mandate reads ‘The Mandatory agrees that, if *any dispute* whatever should arise between the Mandatory and another Member of the League of Nations relating to the interpretation or the application of the provisions of the Mandate, *such a dispute*, if it cannot be settled by negotiation, shall be submitted to the Permanent Court of International Justice provided for by Art. 14 of the Covenant of the League of Nations’ (emphasis added).

¹⁵ *South West Africa* case, 328 (emphasis added).

¹⁶ The Court in the *Georgia v. Russian Federation* case said that ‘To that effect, it needs to determine whether Georgia made such a claim and whether the Russian Federation positively opposed it with the result that there is a dispute between them in terms of Article 22 of CERD’, see *Georgia v. Russian Federation* case, para. 31.

¹⁷ *Case Concerning Certain Property (Liechtenstein v. Germany)* (Preliminary Objections) [2005] ICJ Rep 6, para. 23.

¹⁸ *Ibid*, para. 25.

¹⁹ There are several scholars and judges who are of the opinion that the terms ‘dispute’ and ‘difference of opinion’ are not identical, for example Judge Rolin-Jacquemyns in his dissenting separate opinion in *Interpretation of the Statute of the Memel Territory* case. See dissenting separate opinion of Judge Rolin-Jacquemyns in *Interpretation of the Statute of the Memel Territory (Great Britain, France, Italy, Japan v. Lithuania)* (Preliminary Objection) [1932] PCIJ Series A/B No 47, 258.

²⁰ Hans Kelsen describes that ‘...[a]ny dispute is a situation whereas not every situation is a dispute’ Han Kelsen, *The Law of the United Nations: A Critical Analysis of Its Fundamental Problems* (Law Book Exchange 2000) 360.

²¹ J. G. Merrills, *International Dispute Settlement* (5 edn, CUP 2011)1; Sydney D. Bailey, ‘Peaceful Settlement of International Disputes’ in K. Venkata Raman (ed), *Dispute Settlement Through the United Nations* (Dobbs Ferry, N.Y Oceana Publications 1977) 81.

general attitude of mutual dislike or hostility between them.²² As the Court in the Request for an Interpretation of the Judgment of 20 November 1950 in the *Asylum* case clearly states: ‘A dispute requires a divergence of views between the parties on definite points.’²³

As Charles de Visscher observes, a dispute stems from a disagreement between States on a certain matter which is sufficiently circumscribed (*‘suffisamment circonscrit’*) to lend itself to definite claims.²⁴ The term differences of opinion (*‘divergences d’opinion’*) can be found in compromissory clauses in some international agreements especially the old treaties which concluded before 1945.²⁵ The PCIJ had a chance to consider how the existence of a difference of opinion is manifested. In the judgments of the PCIJ in the *Certain German Interests in Polish Upper Silesia* case, and the Court held that:

‘a difference of opinion exists as soon as one of the Governments concerned points out that the attitude adopted by the other conflicts with its own views.’²⁶

Moreover, the Court stated further that in a difference of opinion:

‘this condition (the existence of a difference of opinion) could at any time be fulfilled by means of a unilateral action on the part of the applicant Party.’²⁷

In some exceptional cases and under express provision, the existence of a difference of opinion is left to the discretion of each Party.²⁸ For example, in the *Interpretation*

²² Richard Bilder uses the term ‘a general attitudes of mutual dislike’ to signify that a disagreement between two countries cannot attain the qualification of a dispute. See Richard Bilder (n 3), 4. And see also John Collier and Vaughan Lowe, *The Settlement of Disputes in International Law: Institutions and Procedures* (OUP 2000) 1.

²³ *Request for Interpretation of the Judgment of 20th November 1950 in the Asylum Case (Colombia v. Peru)* (Judgment) [1950] ICJ Rep 395, 403.

²⁴ In the French text it states that ‘suffisamment circonscrit pour se prêter à des prétentions claires’ See Charles de Visscher, *Theory and Reality in Public International law* (Rev. edn, Princeton University Press 1968) 353.

²⁵ Art. 23 of the 1922 Convention of Geneva concerning Upper Silesia on which it granted the Court’s jurisdiction when it provided that ‘1. Should *differences of opinion* respecting the construction and application of Articles 6 to 22 arise between the German and Polish Governments, they shall be submitted to the Permanent Court of International Justice.

²⁶ *Polish Upper Silesia* case, 14.

²⁷ *Ibid*, 14.

²⁸ See note 1 in Charles de Visscher, *Aspects Récents du Droit Procédural de la Cour Internationale de Justice* (A. Pedone 1966) 38.

of *Judgments Nos. 7 and 8 (Factory at Chorzów)* case, the PCIJ concluded that a difference of opinion existed between Poland and Germany ‘as soon as one of the Parties considered that there was a difference of opinion arising out of the interpretation and application of Articles 6 to 22 of the Convention.’²⁹

It should be noted that the context in which it was considered by the PCIJ was concerned only with the term ‘difference of opinion’ contained in a specific compromissory clause. However, it did not clarify whether the PCIJ intended to draw a clear distinction between the concept of a dispute and the concept of a difference of opinion. In addition, it was far from clear whether the Court wanted to give those two terms different implications, or whether it regarded them as interchangeable.³⁰ What is clear is that the PCIJ took a more liberal attitude to establishing the existence of a difference of opinion when interpreting the compromissory clause.³¹ Moreover, what can be seen from the PCIJ judgment is that the threshold of being a ‘difference of opinion’ is lower than what is required by the existence of a dispute.³² That is to say, the condition for the existence of a difference of opinion is less stringent than the condition for the existence of a dispute because it does not require any claims or counter-claims to be put forward by the parties.

The term ‘difference of opinion’ has a similar meaning to the term ‘divergence’ in the sense that these two terms require a low level of hostility. The ICSID Tribunal in *Helnan v. Egypt* clearly distinguished the terms ‘divergence’ and ‘dispute’.³³ The Tribunal specified one key point: although the two terms share the same element, that is the existence of a disagreement between the parties on specific facts or situation, the distinction which can be drawn is that, in the case of a divergence, the parties hold different views but without necessarily pursuing the difference in any active manner.³⁴ In the case of a dispute, it should have

²⁹ See *Interpretation of the Judgments Nos. 7 and 8* case, 11.

³⁰ Hans Von Mangoldt, ‘Arbitration and Conciliation’ in *Judicial Settlement of International Disputes: International Court of Justice, Other Courts and Tribunals, Arbitration and Conciliation: An International Symposium* (Springer 1974) 521.

³¹ See Georges Abi-Saab, *Les Exceptions Préliminaires Dans la Procédure de la Cour Internationale, Étude des Notions Fondamentales de Procédure et des Moyens de Leur Mise en Oeuvre* (A. Pedone 1967) 126, and especially in footnote 142.

³² Christian Tomuschat, ‘Comments on Article 36 of the ICJ Statute’ in Andreas Zimmermann, Christian Tomuschat and Karin Oellers-Frahm (eds), *The Statute of the International Court of Justice: A Commentary* (OUP 2006) 598.

³³ *Helnan International Hotels A/S v Arab Republic of Egypt* (ICSID Case No ARB/05/19), (Decision on Jurisdiction), 17 October 2006, para. 52.

³⁴ *Ibid*, para. 52.

circumstances which indicate that the parties wish to settle their differences before a third party or some other means of dispute settlement. The Tribunal held further that:

‘different views of parties in respect of certain facts and situations become a ‘divergence’ when they are mutually aware of their disagreement. It crystallises as a ‘dispute’ as soon as one of the parties decides to have it solved, whether or not by a third party.’³⁵

Concurrent with the above dictum was the opinion of Antonio Cassese, which he has suggested in his article written in 1975, that the mere existence of a general disagreement would not be sufficient to establish a dispute, but: ‘Disagreement must have arisen inasmuch as both parties concerned decided they would not forgo the possibility of a judicial settlement’.³⁶

Lastly, the term ‘conflict’ shall not be understood the same thing as the term ‘dispute’ According to Collier and Lowe, the term conflict is used to signify a general state of hostility between the parties.³⁷

To sum up, the concept of international dispute has been developed for more than eighty years by international courts since the *Mavrommatis Palestine Concessions* case. It seems that the criteria for ascertaining the existence of a dispute, especially those developed by the PCIJ and ICJ, have always been referred by the other tribunal when they have to consider the question of jurisdiction. There is, according to the jurisprudences of the courts and the tribunals, a minimum that is required in order to establish the existence of an international dispute. It can be concluded that an international dispute may be defined as follows:

It is a situation in which two or more subjects of international law have a clash of specific opposing juridical attitudes in relation to the interpretation and application of international norms. It is a manifestation of opposite views by the parties concerned resulting, on the one side, from a concrete claim advanced by one of the parties that it must adopt a certain attitude in accordance with international law and, on the other side, of the positive opposing of

³⁵ Ibid, para. 52.

³⁶ Antonio Cassese, ‘The Concept of ‘Legal Dispute’ in the Jurisprudence of the International Court’ (1975) 14 *Communication e Studi* 173, 178.

³⁷ Collier and Lowe (n 22) 1.

this claim by the other party with a view to justifying its conduct under international law. The refusal to accede to the claim may be conveyed through conduct which expresses an unwillingness to accept the other party's views.

2. A CLARIFICATION OF THE TERM 'INTERNATIONAL ENVIRONMENTAL DISPUTE'

Although, as stated above, a definition of dispute in general international law is repeated by the PCIJ and the ICJ, it appears to be the case that a definition of an international *environmental* dispute has never been explicitly pronounced by any international court or tribunal. The aim of this present section is to discover the proper meaning of international environmental disputes which will be used throughout this study.

2.1 The Problem of Defining the Term 'International Environmental Dispute'

It can be observed that there is little consensus about the definition of international environmental dispute. There are various commentators who are reluctant and wary of giving a definite meaning to the term *international environmental dispute*. Philippe Sands, for example, deliberately avoids defining the term environmental dispute. He is of the opinion that:

'[i]t is more appropriate to talk about disputes which have an environmental or natural resources component than to characterize a dispute as an environmental dispute.'³⁸

Throughout his article, Sands uses other terms, i.e.: 'disputes having an environmental component', 'disputes with an environmental element' and 'environmentally related disputes' and 'international environmental dispute' interchangeably.³⁹

Alan Boyle also observes the difficulty in defining the term 'environmental dispute' and has made the following observations:

³⁸ Philippe Sands, 'Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law' in Tafsir Malick Ndiaye, Rüdiger Wolfrum and Chie Kojima (eds), *Law of the Sea, Environmental Law, and Settlement of Disputes : Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff Publisher 2007) 319.

³⁹ Ibid, 313, 314, 316, 317.

‘[i]t is not easy to identify what are environmental cases; cases may raise environmental issues, but they rarely do so in isolation.’⁴⁰

Similarly, Tim Stephens is of the view that:

‘It is increasingly difficult to identify international disputes that are solely environmental in character...In reality disputes involving environmental issues are almost always intertwined with other issues, and with other fields of international law.’⁴¹

From the quotations mentioned above, it is obvious that the difficulty in defining environmental dispute is closely linked to its nature. The main argument that scholars put forward is that international environmental disputes do not exist in isolation from the other fields of international law, such as the law of treaties, the law of state responsibility, international trade law, international human rights law, international fisheries law, etc. Accordingly, in some cases, a particular dispute is not a purely environmental dispute. It is more appropriate to say that some international disputes which are brought before the courts have an environmental aspect.

It is of the greatest interest to note that the above reasons are always suggested when scholars discuss the failure of the ICJ’s Chamber of the Court for Environmental Matters which was established in April 1993 for the purpose of dealing specifically with environmental disputes.⁴² The reason why the Chamber of the Court for Environmental Matters has been closed down was based on the plausible assumption that States rarely considered their disputes as purely environmental because international disputes are much more interlinked and integrated with other

⁴⁰ Alan Boyle, ‘Settlement of Disputes Relating to the Law of the Sea and the Environment’ in Kalliopi Koufa (ed), *International Justice – XXVI Thesaurus Acroasium* (Thessalonika : Sakkoulas Publications 1997) 349.

⁴¹ Tim Stephens, ‘The Settlement of Disputes in International Environmental Law’ in Shawkat Alam and others (eds), *Routledge Handbook of International Environmental Law* (Routledge 2012) 177.

⁴² The driving forces behind the formation of this special standing chamber were the developments of environmental law and nature protection which have taken place before the ICJ and, therefore, a preparation to the fullest possible extent to deal with any environmental case was needed. Since the creation of this chamber, it has not yet received any cases, and in 2006 the Court decided not to hold elections for a Bench for the Chamber. ICJ, *Communiqué 93/20, Constitution of a Chamber of the Court for Environmental Matter* (19 July 1993), reprinted at <<http://www.icj-cij.org/presscom/files/7/10307.pdf>> accessed 10 October 2013, and see <<http://www.icj-cij.org/court/index.php?p1=1&p2=4>> accessed 10 October 2013.

fields of international law.⁴³ It can be seen that the *Gabčíkovo-Nagymaros* case is always used as a classic example to justify this assumption. In this case, the arguments of both parties were linked to other areas of international law, such as the law of treaties and the law of State responsibility. If we examine the argument of the parties, we will find that Hungary tried to justify the lawfulness of its termination of the treaty by invoking a variety of principles as grounds for terminating the treaty, such as a supervening impossibility of performance, a fundamental change of circumstances and a material breach of the treaty.⁴⁴ Furthermore, Hungary substantiated its claims by invoking environmental issues, such as invoking substantive elements that it said had changed fundamentally, namely the transformation of the treaty into a prescription for environmental disaster.⁴⁵

2.2 Some Possible Definitions of International Environmental Disputes

While some scholars avoid providing a definition to the term ‘international environmental disputes’, it was explicitly defined by Richard Bilder, Catherine Cooper, Cesare Romano and Ellen Hey.

In his Hague lectures of 1975 Richard Bilder put forward the following definition of international environmental dispute as follows:

‘...[a]ny disagreement or conflict of views or interests between States relating to the alteration, through human intervention, of the natural environmental system.’⁴⁶

Another scholar who is willing to define the term is Catherine Cooper. She lucidly explains that:

⁴³ Malgosia Fitzmaurice, ‘The International Court of Justice and Environmental Disputes’ in Duncan French, Matthew Saul and Nigel D. White (eds), *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010) 54-55; Phoebe N. Okowa, ‘Environmental Dispute Settlement: Some Reflections on Recent Developments’ in Malcolm D. Evans (ed), *Remedies in International Law: The Institutional Dilemma* (Oxford Hart 1998) 168; Alan Boyle, ‘The Gabčíkovo-Nagymaros Case: New Law in Old Bottles’ (1997) 8 YIEL 13, 13

⁴⁴ *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)* (Judgment) [1997] ICJ Rep 7, para. 92 (hereinafter *Gabčíkovo-Nagymaros* case).

⁴⁵ Ibid, para. 95. See also the *Gabčíkovo-Nagymaros* case, Memorial of the Republic of Hungary, Vol 1 (2 May 1994) para. 10.74.

⁴⁶ Richard Bilder, ‘The Settlement of Disputes in the Field of the International Law of the Environment’ (1975) 144 Recueil des Cours 139, 153.

‘An international environmental dispute exists whenever there is a conflict of interest between two or more states (or persons within those states) concerning the alteration and condition (either qualitatively or quantitatively) of the physical environment.’⁴⁷

Writing in 2000, Cesare Romano concludes, after combining three words together (disputes, international and environment), that an international environmental dispute is:

‘A conflict of views or of interest between two or more States, taking the form of specific opposing claims and relating to an anthropogenic alteration of an ecosystem, having a detrimental effect on human society and leading to environmental scarcity of natural resources.’⁴⁸

Ellen Hey suggests that a dispute may be characterised as an international environmental dispute when a dispute

‘[i]nvolves what is generally considered to be an environmental treaty, as apparent from, for example, the object and purpose of the treaty in question.’⁴⁹

If we look at those possible definitions that have been given by scholars, they have struggled with the word ‘environment’. Bilder refers to the notion of the ‘natural environmental system’ whereas Cooper uses the term ‘physical environment’ both of which are extremely broad. Again, Romano introduced the new notion of an ‘ecosystem’.⁵⁰ What do we learn from these previous attempts to find a suitable definition of international environmental dispute? One thing that can be learnt from this lesson is that the notion of the environment is not static but it has been evolving

⁴⁷ Catherine A. Cooper, ‘The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms’ (1986) 24 Canadian Ybk Intl L 247, 249.

⁴⁸ Cesare P.R. Romano, *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach* (The Hague Kluwer Law International 2000) 29.

⁴⁹ Ellen Hey, *Reflections on an International Environmental Court* (Kluwer Law International 2000) 4.

⁵⁰ See the comments on Romano’s definition in Henry W. McGee and Timothy W. Woolsey, ‘Transboundary Dispute Resolution as a Process and Access to Justice for Private Litigants: Commentaries on Cesare Romano’s *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach* (2000)’ (2001-2002) 20 UCLA J Envtl L & Pol’y 109

over the course of time. Accordingly, the definition of international environmental law may vary from time to time, depending on the changing nature of the notion of the environment. Moreover, giving a decisive definition of international environmental disputes that is linked to the concept of the environment is not an easy task because the notion of ‘the environment’ itself is vague and difficult to identify.⁵¹

Accepting the difficulty in finding a decisive definition of the environment, this research attempts, in the next section, to introduce a new approach to find a suitable definition of international environmental dispute. It should, however, be noted that the definition in this study is only a working definition.

2.3 The Definition of International Environmental Dispute Used in This Study

This study will not attempt to invent any new definition of the term ‘environment’ which may eventually lead us to answer the question of what we mean by an international environmental dispute. Nor is this study concerned with finding out about which treaties can be counted as environmental. Instead, this study will focus on the ‘essential point’ or ‘one of the essential points’ in the conflict between the parties. In addition, throughout this study the emphasis is on ‘environmental obligation’ which will be used as a determinative factor in judging whether a dispute can be categorised as environmental dispute. If the essential point of the claims of the parties is primarily concerned with the failure of the subjects of international law to fulfill their environmental obligations or disagreement on the meaning and scope of an obligation, such disputes may be qualified as ‘international environment disputes’ which fall within the purview of this study.⁵²

In this study, environmental obligations may be understood as, for example, the obligations to provide protection of the physical environment, ecosystems, habitat, endangered species, natural heritage and biodiversity; the obligations to conserve and ensure the sustainable use of natural resources (both living and non-living); and

⁵¹ See Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3 edn, OUP 2009) 5-6 who say that ‘Inevitably, however, any definition of ‘the environment’ will have the Alice-in-Wonderland quality of meaning what we want it to mean’. See for the same opinion in Daniel Bodansky, *The Art and Craft of International Environmental Law* (HUP 2010) 10; Lynton Keith Caldwell, *International Environmental Policy: From the Twentieth to the Twenty-First Century* (3 edn, Duke University Press 1996) 14.

⁵² Philippe Sands once noted that ‘At the root of international environmental conflict lies the actual or perceived failure of a state to fulfill its international environmental obligations...’ See Philippe Sands, ‘Enforcing Environmental Security: The Challenges of Compliance with International Obligations’ (1993) 46 J Int’l Aff 367, 371.

procedural obligations relating to the environment, such as the right to obtain and ensure access to environmental information, the right to participate in environmental decision-making and the right to obtain access to justice. It may be a situation where one party carries out or is permitted to carry out activities that another party (or parties) claims will have deleterious environmental effects.

Accordingly, in this study, the following definition of an international environmental dispute will be used:

An international environmental dispute is a situation in which the subjects of international law have a clash of specific opposing juridical attitudes in relation to the interpretation and application of international environmental obligations, whether embodied in international treaties, custom or general principles of law recognised by civilised nations.

Only disputes that meet the above definition will be the object of this study. To apply the above criteria for determining environmental disputes to some cases, it is clear that the *Shrimp/Turtle* case brought before the WTO was not an environmental dispute because the essential point was not concerned with the protection of the environment.⁵³ That is to say the parties were not in dispute as to whether sea turtles needed to be conserved or how they should be conserved although the WTO Appellate Body mentioned the CITES, the CBD, the Convention on Migratory Species, the United Nations Convention on the Law of the Sea⁵⁴ and Agenda 21 of the Rio Conference on Environment and Development.⁵⁵ Rather, they were in dispute over the legality of a trade measure. On the contrary, if there are questions of a breach of an environmental obligation or the object of the protection is the 'environment', such as a breach of obligations contained in Part XII of UNCLOS concerning the protection and preservation of marine environment, such dispute can be considered as environment.

⁵³ WTO, United States: Import Prohibition of Certain Shrimp and Shrimp Products—Report of the Appellate Body (6 November 1998) WT/DS58/AB/R.

⁵⁴ United Nations Convention on the Law of the Sea (10 December 1982, entered into force 16 November 1994) 1833 UNTS 3, (1982) 21 ILM 1261 (hereinafter UNCLOS).

⁵⁵ United Nations Conference on the Environment and Development: Rio Declaration on the Environment and Development (adopted at Rio de Janeiro, June 14, 1992), UN Doc A/CONF.151/26 (Vol I) (1992); 31 ILM 874.

There are two terms, ‘environment’ and ‘ecosystem’, which have been defined differently by scholars. The former term could be interpreted broadly as the Arbitral Tribunal in the *Iron Rhine Railway* case had the opportunity to touch upon the issue of what the environment is. It noted that the environment could be broadly taken as including air, water, land, flora and fauna, natural ecosystems and sites, human health and safety and climate.⁵⁶ The judgment gave us some idea what the environment shall encompass. The term ‘ecosystem’ is narrower than ‘environment’ in the sense that it can be construed as ‘ecological unit consisting of living and non-living components that are interdependent and function as a community’.⁵⁷ What can be seen from this explanation is that the use of the term ‘ecosystem’ focuses the natural balance or the interactions between the environment and living organisms inhabited within it.

Under such a narrow definition of ‘ecosystem’, it covers mainly the biodiversity issues that cannot be interpreted to include other issues such as the diversion of international waters which this thesis also intend to study. Thus, this thesis prefers to use the term environment instead of ecosystem. In addition, the notion of ‘environment’ as defined by the Arbitral Tribunal correspond with the physical aspect of the definition proposed in this thesis since it places the emphasis on the subject matter rather than biological interdependence or causal relationships.

3. THE CHARACTERISTICS OF INTERNATIONAL ENVIRONMENTAL DISPUTES

The purpose of this section is to sketch the characteristics of international environmental disputes. These characteristics can be observed from the actual disputes which are found frequently as cases which have been brought before dispute settlement bodies. In addition, the section will demonstrate the characteristics which are theoretically possible although such a case has not yet happened. It should be noted, however, from the outset that not all the characteristics discussed in this section are exclusive to environmental disputes, nor does every environmental dispute

⁵⁶ *The Arbitration regarding the Iron Rhine ('Ijzeren Rijn') Railway between the Kingdom of Belgium and the Kingdom of the Netherlands (Belgium/The Netherlands)* (2005) 27 RIAA 35, para. 58 (hereinafter *Iron Rhine Arbitration*). See also Council Directive 79/117/EEC of 21 December 1978 prohibiting the placing on the market and the use of plant protection products containing certain active substances, Official Journal L 033, 08/02/1979 P. 0036 – 0040.

⁵⁷ Draft Articles on the Law of the Non-Navigational Uses of International Watercourses and Commentaries thereto and Resolution on Transboundary Confined Groundwater, 1994, ILC, ‘Report of International Law Commission on the Work of Its 46th Session’, Ybk ILC, Vol 2, Part 2, 118; See also Art. 2 of the CBD which defines this term as ‘a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit’

necessarily have these characteristics, but they can be found mostly in environmental disputes than any other international disputes. The ultimate aim of the explanation concerning special feature of environmental disputes is to help in paving the way for the discussion on the suitability of mechanisms for settling international environmental disputes which will be discussed in more details in the chapter 4.

3.1 International Environmental Disputes May Be Bilateral or Multilateral in Character

3.1.1 Bilateral Character of International Environmental Disputes

Disputes are inherently binary. This follows from the definition of a dispute, e.g. the ICJ's emphasis on a dispute being one view/position being opposed by another.⁵⁸ Considering this point from a geographical perspective, a common situation is that environmental disputes involve a dispute between neighbouring States which share the same territorially defined natural resources or ecosystem, such as a shared hydrographic systems or a shared portion of forest expanding over the territory of two States.⁵⁹ It is no exaggeration to say that 'geographical proximity is a key factor in international disputes' including international environmental disputes.⁶⁰ There are two situations that would create a dispute between States sharing a common border.

Firstly, there is a situation when an environmentally unfriendly activity is carried out in one State within its territorial jurisdiction⁶¹ and it causes transboundary environmentally adverse effects in the territory of another State.⁶² In this case the 'victim' State may allege that the other State is breaching its international environmental obligations. For example, in the well-known case of Trail Smelter between Canada and the United States of America (US), the transboundary air pollution arose from the operation of a smelter roasting sulphur-bearing ores by the

⁵⁸ *South West Africa* case, 323

⁵⁹ Peter H. Sand, 'Transnational Environmental Disputes' in Daniel Bardonnet (ed), *Le Règlement Pacifique des Différends Internationaux en Europe: Perspectives D'avenir* (Martinus Nijhoff Publishers 1992) 127.

⁶⁰ Laurence Boisson de Chazournes and Danio Campanelli, 'Neighbour States' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1072?rsk=X3ocfX&result=1&prd=EPIL>> accessed 29 June 2016.

⁶¹ Genowefa Grabowska, 'Environmental Conflicts In Border Areas' in Daniel Bardonnet (ed), *Le Règlement Pacifique des Différends Internationaux en Europe: Perspectives d'Avenir* (Martinus Nijhoff Publishers 1992).

⁶² Xue Hanqin, *Transboundary Damage in International Law* (CUP 2003) 3.

Consolidated Mining and Smelting Company. The smelter is located in Trail, British Columbia, on the Columbia River, about eleven miles from the international boundary between Canada and the US.⁶³

Secondly, there is a situation that two States have access to the same resources, and activities by one State hinder the capability of the other State to exploit such shared resources. This may give rise disputes concerning, for example, the equitable utilisation of international rivers and lakes or the overfishing or sustainable use of marine living resources.

It is worth noting that the bilateral dimension of an environmental dispute may not necessarily take place between neighbouring States; a dispute may also arise between non-neighbouring States. This can be clearly seen in the case of marine resources; for example, in the *Swordfish* case.⁶⁴ These cases were a dispute between EU and Chile concerning swordfish fisheries in the South-Eastern Pacific and was brought to the WTO dispute settlement procedure by the EU and before the ITLOS special chamber by Chile. In 1990 Chile enacted the law related to the conservation and sustainable exploitation of highly migratory swordfish stocks. As a consequence of applying this law, vessels cannot land in Chilean ports if such vessels caught swordfish in contravention to Chile's conservation law, regardless of whether swordfish is caught in the Exclusive Economic Zone (EEZ) or the high seas.⁶⁵ The EU strongly opposed the application of this conservation law beyond the EEZ. It argued that such act could be considered as a violation of UNCLOS provisions concerning high seas freedom. In addition, given that there was no multilateral regional organisation in the Southeast Pacific established with a view to preserve swordfish, the flag State shall have the sole authority in the high seas. On the other hand, Chile claimed that the EU has failed to control the fishing activities carried out by vessels flying the flag of any of its member States in contravention of Articles 116-119 of UNCLOS. Moreover, the EU has also failed to cooperate with Chile as a coastal State for the preservation of swordfish in the high seas adjacent to Chile's

⁶³ *Trail Smelter Arbitration (US v. Canada)* (1941) 3 RIAA 1907 (hereinafter *Trail Smelter Arbitration*).

⁶⁴ *Case concerning the Conservation and Sustainable Exploitation of Swordfish Stocks in the South-Eastern Pacific Ocean (Chile v. European Union)* (Constitution of Chamber, Order of 20 December 2000) ITLOS Reports 2000 (hereinafter *Swordfish* case).

⁶⁵ The EU invoked this fact before the WTO dispute settlement procedure by claiming that such act was in violation of Chile's obligations of GATT 1994 Art. V concerning free transit of goods through the territory of Member States and Art. XI relating to the prohibition on quantitative restrictions on imports or exports of products.

EEZ as required by Article 64 of UNCLOS. However, the cases was removed from the ITLOS and the WTO in 2009, since the parties held the bilateral consultations and reached a new Understanding relating to the cooperation for conservation and management of swordfish stocks.⁶⁶

3.1.2 The Multilateral Character of International Environmental Dispute

In addition to environmental disputes of a bilateral character there are environmental disputes that are concerned with the environmental interests of *more than two States* or the international community in general.

For the first category, fresh water disputes, notably those concerning the non-navigational uses of international watercourses, serve as a good illustration in that they involve a number of competing users or several States which share the interest in the utilisation of international rivers.⁶⁷ For the environmental aspects, the disposal of wastes conducted by one or more States may affect the other riparian States' interest so as to endanger to human health or undermine the integrity of the river's ecosystem. If the affected riparian States seek compensation for injury, disputes arise in this context would certainly not be bilateral dispute but entail several injured States that claim for single action of the polluter.

The second category of multilateral disputes generally arises from the breach of obligations concerning environmental protection that are owed to the international community as a whole (*erga omnes* environmental obligations).⁶⁸ Thus, if a dispute arises, it proceeds beyond the traditional concept of the 'State A v. State B' situation or an *inter partes* issue.⁶⁹ While transboundary pollution between neighbouring States

⁶⁶ *Swordfish* case (Order of 16 December 2009) ITLOS Reports 2009. See also the suspension of proceeding at the WTO, Chile: Measures Affecting the Transit and Importation of Swordfish—Arrangement between the European Communities and Chile (6 April 2001) WT/DS193/3 and WTO, Chile: Measures Affecting the Transit and Importation of Swordfish—Joint Communication from the European Union and Chile (3 June 2010) WT/DS193/4/G/L/367/Add.1.

⁶⁷ Edith Brown Weiss, *International Law for a Water-Scarce World* (Martinus Nijhoff Publishers 2013) 124.

⁶⁸ Shigeta views that the no harm principle (the obligation to prevent), the precautionary principle, the obligation to protect the global environment and the prohibition of nuclear tests, the obligations of the rational use of the high seas and the obligation to secure a human right to a healthy environment could be based for *erga omnes* environmental claims; see Yasuhiro Shigeta, 'Obligation to Protect the Environment in the ICJ's Practice: To What Extent Erga Omnes?' (2012) 55 Japanese Ybk Intl L 176, 200-202. See generally in Christian J. Tams, *Enforcing Obligations Erga Omnes in International Law* (CUP 2005) 119-120.

⁶⁹ Judge Weeramantry also notes in his separate opinion in the *Gabčíkovo-Nagymaros* case that 'international environmental law will need to proceed beyond weighing the rights and obligations of parties within a closed compartment of individual State self-interest, unrelated to the global concerns of humanity as a whole' See *Gabčíkovo-Nagymaros* case, Separate Opinion of Vice-President Weeramantry, 118.

is usually a problem of a bilateral nature, environmental harm that result from the failure of States to comply with their obligations to protect the global environment is multilateral in character.

Such disputes involve the protection of community values in which activities carried out by one state may affect the collective obligations owed to the international community as whole, including future generations,⁷⁰ rather than affecting the legal rights or interests of any one particular state.⁷¹ This is because such community interests are not based on a reciprocal relationship between States, but serve the benefit of humankind as a whole.⁷² With Multilateral Environmental Agreements (MEAs) involving *erga omnes partes* environmental obligations, such as the international agreements which have the purpose of protecting the ozone layer or preventing climate change, the '[n]on-performance by one party defeats the whole purpose of the treaty.'⁷³ In addition, the non-performance of States may affect the survival of entire human kind.⁷⁴

Three categories of dispute concerning community interests may be distinguished.

The first category is an environmental dispute concerning common areas. These areas are located beyond the limits of any national jurisdiction and are not subject to appropriation by States.⁷⁵ The high seas and outer space are examples which come within the concept of the global commons.⁷⁶ Multilateral environmental disputes may arise out of activities which are carried out within global commons areas

⁷⁰ Pemmaraju Sreenivasa Rao, 'The Concept of International Community in International Law: Theory and Reality' in Isabelle Buffard and others (eds), *International Law between Universalism and Fragmentation: Festschrift in Honour of Gerhard Hafner* (Martinus Nijhoff Publishers 2008) 88.

⁷¹ Sand (n 59) 127.

⁷² Eva M. Kornicker Uhlmann, 'State Community Interests, Jus Cogens and Protection of Global Environment: Developing Criteria for Peremptory Norms' (1998-1999) 11 *Geo Int'l Env'tl L Rev* 101, 106-107.

⁷³ Malgosia Fitzmaurice, 'Necessity in International Environmental Law' (2010) 41 *Netherlands Ybk Intl L* 159, 187. James Crawford is of the opinion that examples of such obligations in the implementation of which all the States which are parties to a treaty have 'a common legal interest' arise in the field of the environment, especially in relation to biodiversity. See ILC, 'Third report on State responsibility by Mr. James Crawford, Special Rapporteur' (1 May-9 June and 10 July-18 August 2000) UN Doc A/CN.4/507, para. 104.

⁷⁴ See generally in Bruno Simma, 'From Bilateralism to Community Interest in International Law' (1994) 250 *Recueil des Cours* 217, 217-384.

⁷⁵ See generally in Jutta Brunnée, 'Common Areas, Common Heritage, and Common Concern' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007) 557.

⁷⁶ One may argue that Antarctica is a common area. However, Antarctica is a debatable example because of the position of the seven claimant States, which have not (yet) renounced their claims to territory in Antarctica but only agreed not to assert their claims—See Art. IV of the Antarctic Treaty (adopted 1 December 1959, entered into force 23 June 1961) 402 UNTS 71.

and cause adverse effects to the environment there. One example might be the allocation or over-exploitation of marine living resources in the high seas, which may lead to the reduction of fish stocks. In addition, States may breach the obligation not to pollute the marine environment in the high seas.⁷⁷ Another example is the contamination of the environment of outer space which may eventually hinder the exploration of—or scientific research into—outer space by other States.⁷⁸ It should be noted that, on the one hand, damage may be caused to the environment of the global commons itself—either to the living or the non-living components of these areas—or, on the other hand, a dispute may arise in relation to the purely economic loss to the other States, in the sense that they cannot fully exercise their rights to exploit these natural resources.

The second category of dispute concerns common heritage. Common heritage has been applied to various areas and resources. In UNCLOS the ‘Area’—the seabed and ocean floor beyond the limits of national jurisdiction—and its resources fall within this concept.⁷⁹ Common heritage resources are subjected to international management, and thus disputes may arise from the management or exploitation of these resources although in practice none yet have been arisen.

The third category is disputes concerning matter of common concern of mankind.⁸⁰ Unlike common areas and common heritage, this kind of dispute is not confined to certain areas beyond the limits of national jurisdiction of States or their resources. Rather, according to the Glowka, Burhenne-Guilmin and Synge, the term common concern implies ‘a common responsibility to the issue based on its paramount importance to the international community.’⁸¹ In this sense, it is possible that environmental processes or protective action take place wholly or partly in the areas beyond the jurisdiction of any States or within the jurisdiction of particular

⁷⁷ See the obligation of States related to the protection of the marine environment in Arts. 194 and 207-212 of UNCLOS.

⁷⁸ Kathy Leigh, ‘Liability for Damage to the Global Commons’ (1992) 14 Australian Ybk Intl L 129, 143. See Art. IX the 1967 Treaty on Principle Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (adopted 27 January 1967, entered into force 10 October 1967) 610 UNTS 205 and Art. 7 of the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (adopted 5 December 1979, entered into force 11 July 1984) 1363 UNTS 3.

⁷⁹ Art. 136 of UNCLOS.

⁸⁰ See Alexandre Kiss, ‘Economic Globalization and the Common Concern of Humanity’ in Alexandre Kiss, Dinah Shelton and Kanami Ishibashi (eds), *Economic Globalization and Compliance with International Environmental Agreement* (Kluwer Law International 2003) 6-8.

⁸¹ Lyle Glowka, Françoise Burhenne-Guilmin and Hugh Synge, *A Guide to the Convention on Biological Diversity* (IUCN the World Conservation Union 1994) 3.

States.⁸² Examples of common concern are climate change and the protection of biological diversity.⁸³ The philosophical foundation of common concern lies in the fact that the 'international community has both legitimate interest in resources of global significance and a common responsibility to assist in their protection.'⁸⁴ Moreover, neither the global climate nor biological diversity can be considered as natural assets to be exploited for the benefit of international community as a whole. Rather, they are to be preserved from destruction by human activities.⁸⁵ Adopting measures to tackle environmental degradation and the need for the cooperation of States in addressing the problems may be the key point of the concept of common concern of humankind.⁸⁶

It should be noted, with regard to multilateral environmental disputes, that a distinction can probably be made between interpretation of a legal provision and its application. One could envisage a genuinely multilateral dispute in the case of interpretation, where, for example, State A argues that a treaty should be interpreted to mean X, State B that it means Y, and State C that it means Z etc. With a dispute concerning application, it would seem that a multilateral dispute would always have to be in the form of X versus Y, where one of X or Y or both of them consists of two or more States.⁸⁷ In any case, the issue between all the States involved would have to be identical. In the case where X equals the international community (or most/all the parties to a multilateral treaty), X could be a single State representing the international community or the other States parties.

It is interesting to note that some environmental disputes cannot be easily categorised as bilateral or multilateral. There are environmental disputes that are concerned with the environmental interests of more than one State. In this sense, their multilateral character can be seen from the fact that a number of States are involved in

⁸² Alan Boyle, 'Remedying Harm to International Common Spaces and Resources: Compensation and other Approaches' in Peter Wetterstein (ed), *Harm to the Environment: The Right to Compensation and the Assessment of Damages* (OUP 1997) 85.

⁸³ Rüdiger Wolfrum, 'Enforcing Community Interests Through International Dispute Settlement: Reality or Utopia?' in Ulrich Fastenrath and others (eds), *From Bilateralism to Community Interest: Essays in Honour of Judge Bruno Simma* (OUP 2011) 1135-1136.

⁸⁴ Boyle, 'Remedying Harm to International Common Spaces and Resources: Compensation and other Approaches' (n 82) 86.

⁸⁵ Frank Biermann, 'Common Concerns of Humankind and National Sovereignty' in Canadian Council on International Law (ed), *Globalism: People, Profits and Progress: Proceedings of the 30th Annual Conference of the Canadian Council on International Law* (Kluwer Law International 2002) 162. See also Frank Biermann, "Common Concern of Humankind": The Emergence of a New Concept of International Environmental Law' (1996) 34 *Archiv des Völkerrechts* 426.

⁸⁶ Ellen Hey, 'Common Interests and the (Re)constitution of Public Space' (2009) 39 *EPL* 152, 153.

⁸⁷ See further in chapter 4, section 2.2.1.

such disputes. However, a dispute that is qualified as multilateral may also have a bilateral character because each victim State claims a remedy from the wrongdoing State individually. But, the dispute cannot be said to have the quality of being wholly bilateral as it relates to an issue where there are several victim States involved. The *Whaling* case is a good example that belongs to this ‘in between’ category. In this case, Australia instituted proceedings against Japan, and it alleged that Japan had breached international obligations concerning an obligation not to kill whales for commercial purposes and that JARPA II was a program for commercial whaling which was conducted under the guise of a program of scientific research.⁸⁸ Although the *Whaling* case, in one sense, was a bilateral dispute between Australia and Japan, it was not wholly bilateral as it related to an issue where several States disputed Japan’s interpretation and application of the scientific whaling exception in the International Convention for the Regulation of Whaling.⁸⁹ In addition, Australia was no longer the only one of these States involved in litigation before the ICJ as New Zealand had been given permission to intervene. In this sense the case is no longer a bilateral dispute.

The multilateral background of this case grew out of the fact that the International Whaling Commission (IWC) has repeatedly addressed a number of recommendations to Japan with a view to suspending indefinitely the lethal aspects of JARPA II.⁹⁰ A similar call was made by 30 States (including Australia) and the European Commission in an aide-mémoire sent to Japan on 21 December 2007.⁹¹ The hint of hybrid dispute can also be seen in the Counter-Memorial of Japan when it claimed that ‘what is in reality a matter of multilateral marine resource management has been disguised as a bilateral legal dispute and brought before the Court’.⁹²

To sum up, the special characteristics of international environmental disputes may cause some difficulties in settling a dispute. The question is that: Are the dispute settlement mechanisms suitable for settling bilateral or multilateral environmental disputes? This is a question that will be answered in chapters 4.

⁸⁸ *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening)* (Judgment) [2014] ICJ Rep 226 (hereinafter *Whaling* case).

⁸⁹ The International Convention for the Regulation of Whaling (adopted 2 December 1946, entered into force 10 November 1948) 161 UNTS 2124 (hereinafter ICRW).

⁹⁰ See, for example, IWC, Resolutions 2005-1, ‘Resolution on JARPA II’ (4 July 2005) and Resolutions 2007-1, ‘Resolution on JARPA’ (4 June 2007), available at < <https://archive.iwc.int/pages/search.php?search=%21collection72&k=>> accessed 19 June 2016.

⁹¹ *Whaling* case, Annex 67 to the Memorial of Australia, Volume 1, 311-312.

⁹² *Whaling* case, Counter Memorial of Japan, para. 13.

3.2 International Environmental Disputes May Have a Multi-Dimensional Character

3.2.1 The Complexities of Scientific and Technical Arguments in International Environmental Disputes

A first aspect of the possible multi-dimensional character of an international environmental dispute is that it may raise complex scientific and technical issues.⁹³ Scientific and technical information have been used as evidence to substantiate the claims of disputants in order to inform and convince decision-makers which is usually presented in a competing manner. Undoubtedly, decision-makers need to engage with certain scientific and technical aspect and weigh such evidence before making decisions. The *Gabčíkovo-Nagymaros* case is a good example of this. The Court had to deal with a vast amount of scientific materials which were submitted to it by the Republic of Hungary, such as geological evidence, hydrological conditions, surface and ground water quality assessments, floodplain ecology and EIA methodology, to name but a few.⁹⁴ In the *Whaling* case, the ICJ was asked to interpret the term ‘scientific research’ stipulated in the ICRW.⁹⁵ It is clear that the highly complex scientific evidence with regard to whaling, such as the scientific and technical information about methodology that used to collect sample sizes of whales and the use of lethal methods, was presented by the parties to the ICJ for appraising Japan’s scientific research conducted under the programme called JARPA II in order to ascertain whether or not it was consistent with its obligations under the ICRW.⁹⁶ A dispute concerning climate change may also have to be decided on the basis of scientific and technical data in order to ascertain the sources of climate change.⁹⁷ It is undeniable that scientific methodology will play an important role in evaluating the

⁹³ Tim Stephens, *International Courts and Environmental Protection* (CUP 2009) 32.

⁹⁴ Anna Riddell and Brendan Plant, *Evidence before the International Court of Justice* (British Institute of International and Comparative Law 2009) 347.

⁹⁵ Makane Moïse Mbengue and Rukmini Das, ‘The ICJ’s Engagement with Science: To Interpret or not to Interpret?’ (2015) 6 JIDS 568, 574.

⁹⁶ See generally in Remi Moncel, ‘Dangerous Experiments: Scientific Integrity in International Environmental Adjudications after the ICJ’s Decision in Whaling in the Antarctic’ (2015) 42 ELQ 305, 305-345.

⁹⁷ Navraj Singh Ghaleigh, ‘Science and Climate Change Law—The Role of the IPCC in International Decision Making’ in Cinnamon P. Carlarne, Kevin R. Gray and Richard Tarasofsky (eds), *The Oxford Handbook of International Climate Change Law* (OUP 2016) 67.

compliance of the parties, especially in MEAs.⁹⁸ Moreover, the role played by science in the process of dispute resolution has also been formalised in international agreements.⁹⁹

3.2.2 The Complexity of Questions About Societal Choice in International Environmental Disputes

A second aspect of the possible multi-dimensional character of an international environmental dispute is that it may involve complex questions relating to social, economic and political choices which may differ from country to country depending on the environmental policy decisions of particular States.¹⁰⁰ The protection of fresh water is one of the examples. Laurence Boisson de Chazournes notes that ‘disputes concerning fresh water are varied. They reflect the many values of water: social, ecological, cultural, and economic.’¹⁰¹ When a dispute arise, it is inevitable that these wide arrays of elements are intermingled with the legal questions so as to make the dispute complex and subtle.

Two States may have competing interests, namely one State may try to develop its own country or boost its own economy by exploiting natural resources, such as building a dam,¹⁰² and the other State may want to protect the environment. According to Bilder, environmental disputes tend to raise issues of balancing benefits and gains, apportioning costs and tradeoffs.¹⁰³ Weighing the benefits of the wished for activities against harms to the environment which will occur is necessary for States in deciding whether to proceed with the project or not. This situation may eventually trigger an inter-state dispute. In the *Indus Waters Kishenganga Arbitration*, for example, Pakistan submitted an application for interim measures and requested the

⁹⁸ See generally in Steinar Andresen, ‘The Role of Scientific Expertise in Multilateral Environmental Agreements: Influence and Effectiveness’ in Monika Ambrus and others (eds), *The Role of ‘Experts’ in International and European Decision-Making Processes: Advisors, Decision Makers or Irrelevant Actors?* (CUP 2014) 105-125.

⁹⁹ Francesco Francioni, ‘Dispute Avoidance in International Environmental Law’ in Alexandre Kiss, Dinah Shelton and Kanami Ishibashi (eds), *Economic Globalization and Compliance with International Environmental Agreements* (Kluwer Law International 2003) 231.

¹⁰⁰ Birnie, Boyle and Redgwell (n 51) 213, Bilder (n 46) 154.

¹⁰¹ Laurence Boisson de Chazournes, ‘Dispute Settlement Procedures and Fresh Water: Multiplicity and Diversity at Stake’ in Nerina Boschiero and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013) 109.

¹⁰² Matthew Happold, ‘Dams and International Law’ in Laurence Boisson de Chazournes and Salman M.A. Salman (eds), *Les Ressources en eau et le Droit International = Water Resources and International Law* (Martinus Nijhoff Publishers 2005) 579. Natalie Klein, ‘Settlement of International Environmental Law Disputes’ in Malgosia Fitzmaurice, David M. Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010) 381.

¹⁰³ Bilder (n 46) 154.

Court of Arbitration to order India to cease work on the Kishenganga Hydro-Electric Project (KHEP) until such time as the Court rendered its award on the merits of the case.¹⁰⁴ Pakistan argued that the continuation of the KHEP might create a risk of irreparable prejudice to the flow of the river.¹⁰⁵ It is clear from India's Response that it took a different view from Pakistan in continuing to construct the dam. India attempted to convince the Court not to grant an interim measure by raising the issue of economic necessity and threats to human survival. It claimed that if the Court were to adopt interim measures to cease work on KHEP, it would lead to India being seriously short of power.¹⁰⁶ It would also lead to 'enormous financial costs' to the project and would impact the lives of India's citizens currently engaged in the project who would lose their 'job and their livelihood'.¹⁰⁷ The Tribunal did not order India to halt any construction activity on the KHEP, since the project would not in and of themselves affect the flow of the river. In addition, in the Tribunal's view, 'the construction of the project would merely be one in which India would have invested considerable sums of money without reaping the benefit of the operation of the KHEP'.¹⁰⁸ Moreover, in the partial award the Tribunal held that India may divert water from the KHEP for power generation.¹⁰⁹

It appears that the societal choices of States do not necessarily differ from one another at the very beginning when undertaking a joint project. A dispute may arise at a later stage when they consider that their interests cannot anymore be reconciled. For example, in the *Gabčíkovo-Nagymaros* case, at the ICJ, it came as no surprise at the very beginning of the project that Hungary and Slovakia had a mutual interest in damming the Danube for several purposes, for example, electricity production, flood protection, transportation with a view to enhancing the national economy of the two countries.¹¹⁰ However, the Hungarian Government decided to abandon the

¹⁰⁴ *In the Matter of the Indus Waters Kishenganga Arbitration before the Court of Arbitration Constituted in Accordance with the Indus Water Treaty 1960 between the Government of India and the Government of Pakistan Signed on September 19, 1960 (Pakistan v. India)* (Order on the Interim Measures Application of Pakistan Dated June 6, 2011) [23 September 2011], para. 52 (hereinafter *Indus Waters Kishenganga Arbitration*).

¹⁰⁵ *Ibid.*, para. 85-86

¹⁰⁶ *Ibid.*, para. 92.

¹⁰⁷ *Ibid.*

¹⁰⁸ *Ibid.*, para. 143.

¹⁰⁹ See *Indus Waters Kishenganga Arbitration* (Partial Award) [18 February 2013] 154 ILR 1, Part V. Decision, A (2).

¹¹⁰ See the preamble of the Treaty of 16 September 1977 Concerning the Construction and Operation of the Gabčíkovo-Nagymaros System of Locks (Czechoslovakia-Hungary) (16 September 1977) 1109 UNTS 235.

construction on its part (the Nagymaros dam) for the reason that the project was no longer environmentally or economically viable. The *Gabčíkovo-Nagymaros* case is a good example in which the other issues external to legal boundary may be of equal important as the legal dimensions. As Assetto and Bruyninckx state in the context of this case that ‘environmental conflicts must be combined with conflicts in other areas (especially in the political and economic arenas) in order to pose a significant threat to national security’.¹¹¹

Another example is the dispute concerning whaling. In order to settle the dispute, decision-making bodies need to understand not only legal obligations associated with whaling but they should also take into account various dimensions, such as commercial dimension, aboriginal subsistence whaling, cultural diversity, rights of animal and environmental ethics.¹¹² As Fitzmaurice puts it that the whaling dispute should be resolved ‘in a comprehensive and holistic manner’.¹¹³

3.3 International Environmental Disputes May Involve Difficulties in Identifying the Source of the Alleged Breach of an International Environmental Obligation

The identification of the source of the alleged breach of international obligations involve two distinct issues:

1) Identifying the facts that give rise to a dispute. For example, if oil washes up on State A’s beach, it will be necessary to determine where it has come from. It could be from an offshore installation on State B’s continental shelf or from an oil tanker having the nationality of State C. There is also the case of transboundary air pollution that one State emits noxious fumes to the environment and the fumes transcend the boundary of that State into the other State’s territory which cause adverse effects on the ecosystem as well as the people living in such State. Obviously, the situation is not that complex. The State whose interest is infringed can identify the source of the breach by supporting its allegation with scientific evidence showing the source of the fumes as shown in the *Trail Smelter Arbitration* where there was only the actions of single polluter. Also, the question of which State killed whales for

¹¹¹ Valerie J Assetto and Hans Bruyninckx, ‘Environment, Security and Social Conflict: Implications of the Gabčíkovo-Nagymaros Controversy’ in G Blake and others (eds), *International Boundaries and Environmental Security: Frameworks for Regional Cooperation* (Kluwer Law International 1997) 363.

¹¹² See Keiko Hirata, ‘Why Japan Supports Whaling’ (2005) 8 JIWL 129, 138-148.

¹¹³ Malgosia Fitzmaurice, *Whaling and International Law* (CUP 2015) 307.

commercial purposes, as in the *Whaling* case, or which State contaminated the international river case, is not difficult to answer.

While with bilateral environmental disputes the source of harm and the victim are usually clearly identifiable,¹¹⁴ with many environmental problems, such as overfishing, long-range transboundary air pollution and depletion of the ozone layer, the responsible State causing environmental harm cannot be easily identified. Even if the State that is alleged to be the polluter can be identified, the harm cannot always be easily traced as evinced in the *Aerial Spraying* case.¹¹⁵ This characteristic of international environmental disputes, if not unique, is rarely, if ever, found in other disputes in international law.

One of the most compelling reasons for the complexity in identifying sources of the breach of international environmental obligations involves multiple tortfeasors or accumulative actions of several States over a long period of time.¹¹⁶ Ozone depletion or the long-range transboundary air pollution problem, for example, may not arise from the action of only one State; several States may collectively contribute to emitting carbon dioxide and other harmful gases. Consequently, it may not be known which States have emitted harmful gases; but even where it is known, it may be impossible to quantify the degree of harm caused by each State.¹¹⁷ Another challenge is that the damage to the environment may not occur immediately after international environmental obligations have been breached. For instance, in the climate change context, injury resulting from a breach of international obligations may fully manifest only after a long period of time.¹¹⁸ Therefore, one has to collect huge amounts of data for several years before making a complaint. Moreover, with some kind of environmental harm it may be impossible to identify the wrongdoer, e.g. marine pollution and damage caused to seamounts by bottom trawling.

¹¹⁴ For example, the case concerning transboundary pollution or the failure of a State to preserve its biological diversity located within its national jurisdiction.

¹¹⁵ Alan Boyle, 'Transboundary Air Pollution: A Tale of Two Paradigms' in S. Jayakumar and others (eds), *Transboundary Pollution: Evolving Issues of International Law and Policy* (Edward Elgar Publishing 2015) 244. *Aerial Herbicide Spraying (Ecuador v. Colombia)* (Application Instituting Proceedings) [2008] (hereinafter *Aerial Herbicide Spraying* case). See for more details of the case in chapter 3.

¹¹⁶ Phoebe N. Okowa, *State Responsibility for Transboundary Air Pollution in International Law* (OUP 2001) 11.

¹¹⁷ Malgosia Fitzmaurice and Catherine Redgwell, 'Environmental Non-Compliance Procedures and International Law' (2000) 31 *Netherlands Ybk Intl L* 35, 41.

¹¹⁸ Catherine Redgwell, 'The Wrong Trousers: State Responsibility and International Environmental Law' in Panos Koutrakos and Malcolm Evans (eds), *The International Responsibility of the European Union – European and International Perspectives* (Hart Publishing 2013) 260.

All of those points also lead to the problem of establishing causation between the wrongful act and the damage produced. The causal link between the activities which are supposed to have caused the harmful effects on the environment and the damage to the environment is difficult to establish.¹¹⁹ This is because some environmental problems arise from a combination of various types of pollution emanating from different sources over a long period of time affecting a very large number of people.¹²⁰

All of the issue described above is a question of fact which the dispute settlement means/body would have to determine that question.

2) Once the facts have been determined, the next question is whether those facts represent a breach of an international obligation by another State. So, in the above examples, if it has been determined that the oil comes from State B's continental shelf or State B carries out certain activities which cause the depletion of the ozone layer, the next question is whether State B is in breach of an international obligation. That will involve asking whether the release of the oil or the emission of fumes can be attributed to State B under the rules of State responsibility or whether State B has exercised due diligence over the activities of a non-State operator of the installation or factory. This is a legal question.

3.4 International Environmental Disputes May Involve Complex Questions of Quantifying Damages

It is well established in international law that every international wrongful act of a State entails the international responsibility of that State. When a State is in breach of an international obligation, whether or not the breach is litigated, it is under an obligation to make reparation, of which compensation may be one form.¹²¹ It is possible that when an international environmental dispute arises the victim State may

¹¹⁹ Jacqueline Peel, 'Unpacking the Elements of a State Responsibility Claim for Transboundary Pollution' in S. Jayakumar and others (eds), *Transboundary Air Pollution: A Tale of Two Paradigms* (Edward Elgar Publishing 2015) 68.

¹²⁰ Bilder (n 46) 225. See also Alexandre Kiss, 'Present Limits to the Enforcement of State Responsibility for Environmental Damage' in Francesco Francioni and Tullio Scovazzi (eds), *International Responsibility for Environmental Harm* (Martinus Nijhoff 1991) 5.

¹²¹ See Art. 34 of Draft Articles on Responsibility of States for Internationally Wrongful Acts 2001, ILC, 'Report of International Law Commission on the Work of its 53rd Session' (23 April-1 June and 2 July-10 August 2001) UN Doc A/56/10; Ybk ILC, Vol 2, Part 2, A/CN.4/SER.A/2001/Add.1 (Part 2). The other forms are restitution and satisfaction. See also *Gabčíkovo-Nagymaros* case, para. 152.

claim compensation for damage.¹²² Particularly problematic is the assessment of compensation to environmental damages. While any other damages, such as damage to vessels which may include costs of repair or costs related to the detention of the vessel, may not difficult to calculate, environmental damages are not always easy to quantify in monetary term.¹²³ How can one assess the ecological damage, such as the extinction of certain kind of plants or wildlife or aesthetical, cultural and recreational values of the environment, is less clear. Taking this view one may argue that human beings are going to treat environmental goods as economic products.¹²⁴

James Crawford once noted that:

‘Damage to such environmental value (biodiversity, amenity, etc – sometimes referred to as ‘non-use values’) is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify’.¹²⁵

Redgwell also observed the difficulty in quantifying loss that ‘many environmental components and values do not have an easily ascribed, or any, market value.’¹²⁶ However, although quantifying compensation is not easy to assess, this does not mean that compensation for environmental damage is completely impossible.¹²⁷ What might

¹²² See for example in the *Trail Smelter Arbitration*. However, in the history of judicial settlement of international environmental disputes, it appears that the *Trail Smelter Arbitration* is the only international environmental case where the compensation for environmental damage has been awarded.

¹²³ There is a considerable literature dealing with compensation for environmental damages, for example: Kiss, ‘Present Limits to the Enforcement of State Responsibility for Environmental Damage’ (n 99); René-Jean Dupuy and Daniel Vignes, *A Handbook on the New Law of the Sea*, vol 2 (Martinus Nijhoff Publishers 1991) 1161-1162; Malgosia Fitzmaurice, ‘Liability for Environmental Damage Caused to the Global Commons’ (1996) 5 RECIEL 305; Philippe Sands and Richard B. Stewart, ‘Valuation of Environmental Damage-US and International Law Approaches’ (1996) 5 RECIEL 290; Alan Boyle, ‘Reparation for Environmental Damage in International Law: Some Preliminary Problems’ in Michael Bowman and Alan Boyle (eds), *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (OUP 2002); Tarcisio Hardman Reis, *Compensation for Environmental Damages under International Law: The Role of the International Judges* (Wolters Kluwer 2011).

¹²⁴ Rosa M. Fernández Egea, ‘State Responsibility for Environmental Harm, "Revisited" within the Climate Change Regime’ in Sandrine Maljean-Dubois and Lavanya Rajamani (eds), *La mise en oeuvre du droit international de l'environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011) 410.

¹²⁵ James Crawford, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (CUP 2002) 223.

¹²⁶ Redgwell (n 118) 267, See also Maxine Burkett, ‘Loss and Damage’ (2014) 4 CL 119, 130.

¹²⁷ See Orrego Vicuña, who rightly says that ‘[t]he fact that environmental damage is irreparable or unquantifiable shall not result in exemption from compensation’ see Francisco Orrego Vicuña, ‘Current Trends in Responsibility and Liability for Environmental Harm under International Law’ in Kalliopi Koufa (ed), *Protection of the Environment for the New Millennium: Thesaurus Acroasium Vol XXXI* (Sakkoulas Publications 2002) 172. The international oil pollution compensation regime which

be a problem, as mentioned above, is the establishment of a casual link between the breach of environmental obligations and the damage produced. Given that a casual link may be difficult to establish, the compensation for damage, as argued by Kiss, may be difficult to award in practice.¹²⁸

Furthermore, monetary damages may not be capable of providing effective legal remedies which would return the environment back to its *status quo ante*.¹²⁹ This can be seen, for example, in the climate change context. It is impossible to restore the *status quo ante* although compensation for damage could be paid. The problem with the remedies available for breach of international environmental obligations is the ‘backward looking nature of state responsibility with respect to restitution and compensation.’¹³⁰ It can be observed, however, that the international dispute settlement bodies usually asked the parties to negotiate¹³¹ or indicated measures to be adopted by the parties¹³² rather than awarding the victim States compensation.

3.5 International Environmental Disputes May Involve the Interpretation and Application of Procedural Obligations

Considering the nature of the normative content of international environmental law, a distinction is made between two types of obligations, namely obligations of conduct that have a procedural character, on the one hand, and obligations of result that have a substantive character, on the other.¹³³ Obligations of result refer to the obligations of States which are required to do something with a view to obtaining the required results. It should be noted, however, that a dispute concerning the obligations of result

has become quite adept at quantifying damage caused by oil pollution, see generally in Mans Jacobsson, ‘Oil Pollution Liability and Compensation: An International Regime’ (1996) 1 ULR 260, 260-273.

¹²⁸ Kiss, ‘Present Limits to the Enforcement of State Responsibility for Environmental Damage’ 5.

¹²⁹ The *Chorzow Factory* case indicated that ‘reparation must, as far as possible, wipe out the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed’ see *Chorzow Factory Case (Indemnity) (Merits)* PCIJ Ser.A, No.17 (1928), 47-48.

¹³⁰ Redgwell (n 118) 267.

¹³¹ *Lac Lanoux Arbitration (France v. Spain)* (1957) 24 ILR 101 (hereinafter *Lac Lanoux Arbitration*), 101; *Fisheries Jurisdiction (UK v. Iceland)* (Judgment) [1974] ICJ Rep 3, para. 79; *Gabčíkovo-Nagymaros* case, para. 155.

¹³² *Bering Sea Fur Seals Arbitration* (1989) 1 Moore’s Int Arb 755 (hereinafter *Bering Sea Fur Seals Arbitration*) and *Case concerning Land Reclamation by Singapore in and around the Straits of Johor (No. 12) (Malaysia v. Singapore)* (Provisional Measures, Order of 8 October 2003) ITLOS Reports 2003, (2003) 126 ILR 487 (hereinafter *Land Reclamation* case).

¹³³ *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)* (Judgment) [2010] ICJ Rep 14, para. 32 (hereinafter *Pulp Mills* case).

is not peculiar to environmental disputes, since other disputes in international law generally involve the interpretation of this kind of obligation. Procedural obligations have much been an issue in environmental dispute, since a number of cases have been brought before adjudicative mechanisms, especially in recent years. A number of cases have been brought before adjudicative dispute resolution mechanisms, especially in recent year. They include the *MOX Plant case*,¹³⁴ *Land Reclamation case*,¹³⁵ *Indus Waters Kishenganga Arbitration*,¹³⁶ *Gabčíkovo-Nagymaros case*,¹³⁷ *Pulp Mills case*¹³⁸ and the *Certain Activities/Construction of a Road cases*.¹³⁹

Obligations of conduct that have a procedural character entail obligations to achieve a certain procedure, such as the obligation to carry out an Environmental Impact Assessment (EIA) in any case of significant transboundary risk which is crucially important if a State carry out certain activities in the border area. Moreover, there are also the obligation to notify the other States concerning any activity that may pose a threat of harm to human health and the environment and the obligation to enter into consultation between the States and the obligation to exchange information.¹⁴⁰

The omnipresence of procedural obligations in most international environmental treaties and custom could make international environmental disputes distinctive from another kind of international disputes. The arbitrators in the *Chagos Marine Protected Area* arbitration make a compelling conclusion when they accept that procedural rules exist in international environmental law and ‘such procedural

¹³⁴ *MOX Plant Case (No.10) (Ireland v. UK)* (Provisional Measures, Order of 3 December 2001) ITLOS Reports 2001, (2003) 126 ILR 310; 42 ILM 1187 (hereinafter *MOX Plant case*) para. 89.

¹³⁵ *Land Reclamation case*, para. 106.

¹³⁶ *Indus Waters Kishenganga Arbitration* (Partial Award), para. 450.

¹³⁷ *Gabčíkovo-Nagymaros case*, para. 150.

¹³⁸ *Pulp Mills case*, paras. 67-158.

¹³⁹ *Certain Activities Carried out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)/Construction of a Road in Costa Rica Along the San Juan River (Nicaragua v. Costa Rica)* (Judgment) [2015] paras. 100-120, 146-173, (hereinafter *Certain Activities/Construction of a Road cases*).

¹⁴⁰ There is a considerable literature on the procedural obligations. For example, Frederic Kirgis, *Prior Consultation in International Law: A Study of State Practice* (University Press of Virginia 1983); Phoebe N. Okowa, ‘Procedural Obligations in International Environmental Agreements’ (1996) 67 British Ybk Intl L 275; Günther Hand ‘The Principle of "Equitable Use" as Applied to Internationally Shared Natural Resources: Its Role in Resolving Potential International Disputes over Transfrontier Pollution’ (1978-1979) 14 RBDI 40; Francesco Francioni, ‘International Cooperation for the Protection of the Environment: The Procedural Dimension’ in Winfried Lang, Hanspeter Neuhold and Karl Zemanek (eds) *Environmental Protection and International Law* (Graham & Trotman 1991); Neil Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (CUP 2008).

rules may, indeed, be of equal or *even greater importance than the substantive standards* existing in international law.¹⁴¹

CONCLUSIONS

The main conclusion that can be drawn from the analysis developed in this chapter is that international environmental disputes are disputes that the essential point is concerned with an environmental issue. The definition focuses on the subject matter that international law would like to protect rather than paying attention to particular treaties. Some treaties, such as UNCLOS, are not wholly concerned with the protection of the environment but they might have a section that contains provisions aiming at the protection of the environment. If a State claims that another State has breached such provisions, an international environmental dispute arises.

As far as the features of international environmental disputes are concerned, they tend to exhibit certain characteristics but by no means all environmental disputes have all or any of these characteristics. Firstly, they may be bilateral or multilateral in character. But the most obvious feature that distinguishes environmental disputes from other kinds of international disputes is that some environmental disputes entail collective obligations—rather than involving merely with reciprocal obligations—which are often owed to the international community as a whole or to all the treaty parties to a MEA, not to any specific States. Secondly, arguments of parties in a dispute may involve technical and scientific issues when substantiating their claims in order to persuade international courts or conciliators. Thus, dispute settlement bodies need to have the capacity to evaluate such facts before making any decisions. In addition, environmental disputes may not only involve legal questions but also intertwine with societal aspect including economic and political consideration. Thirdly, the sources of harm underlying the dispute are not always easy to identify, there might be a number of States contribute to cause environmental harm. In addition, the environmental damage might probably emerge after a long period of time. Fourthly, in the case where a State requests a dispute settlement body to decide on the matter of compensation for injury, the dispute may entail a complex process of calculation of the extent of harm and the amount of money that the losing States have to pay. Lastly, international environmental disputes may involve the interpretation

¹⁴¹ *The Chagos Marine Protected Area Arbitration (Mauritius v. UK)* (2015), para. 322 (hereinafter *Chagos MPA Arbitration*) (emphasis added).

and application of procedural obligations. The recent years witnessed an increase in the number of cases brought before the ICJ and *ad hoc* arbitral tribunal that asked them to decide, for example, the circumstance that an EIA should be carried out or the situation where States need to notify the other States about transboundary harm. It must be conceded that non-environmental disputes may also have some or all of the five characteristics. In this case, it could be argued that the most obvious types of dispute that have some/all of these characteristics are, for example, trade disputes and future disputes relating to exploitation in the Area. However, these types of dispute, unlike environmental disputes, have their own dedicated dispute resolution mechanisms, viz. the WTO's Dispute Settlement Understanding (DSU) and section 5 of Part XI of UNCLOS.

Given that international environmental disputes have such certain distinctive features, the question is that: Are the dispute settlement mechanisms that are available in international law suitable and effective for settling an international environmental dispute? The next chapter will examine the various mechanisms that available in international law for settlement of dispute regarding environmental matters and also look at how existing mechanisms have been used. In the next few chapters, there will be the analysis of the degree to which existing mechanisms are suited to addressing these characteristics, and then determine what could be done differently to take better account of the characteristics in dispute resolution.

CHAPTER 3

DISPUTE SETTLEMENT AND INTERNATIONAL ENVIRONMENTAL LAW

INTRODUCTION

This chapter attempts to answer the question of what third-party mechanisms are available for resolving international environmental disputes. The reasons why this chapter attempts to address this question is that we need to know the inherent nature and structural arrangement of each mechanism in order to pave the way to further analysis with regard to their suitability. Each section will begin with the explanation of the nature of those mechanisms before giving further illustration of how such mechanisms work in practice by briefly demonstrating international environmental disputes that were brought before them. Third-party diplomatic means will be discussed first in section 1 followed by judicial means in section 2, Non-Compliance Procedures (NCPs) in section 3 and RFMO panels in the last section. The first two means are the traditional means of third-party of international dispute settlement, as listed, for example, in Article 33 of the UN Charter. NCPs have been developed in MEAs since the late 1980s as a way to promote compliance with MEAs but they may indirectly have a dispute settlement role. The last means has been developed since about 2000 to provide a quick, relatively informal but effective means to resolve technical disputes in RFMOs.

1. THIRD-PARTY DIPLOMATIC MEANS OF DISPUTE SETTLEMENT IN THE FIELD OF INTERNATIONAL ENVIRONMENTAL LAW

This section will describe various methods of dispute settlement that are non-judicial in nature, focusing particularly on environmental matters. Non-judicial means include mediation, conciliation and inquiry and each will be discussed in turn. The reason why good offices will not be discussed is that good offices entail a lesser degree of involvement of the third party and plays a passive role in the process of dispute settlement. They merely encourage disputants to resume negotiation without making any proposals for the parties on the basis of their negotiations.

1.1 Mediation

1.1.1 Conspectus: The Nature of Mediation

Mediation is a form of intervention by a third party. Mediators attempt to bring the parties together with a view to resuming negotiations or accepting an offer of mediation from a third party, who could be an individual, a State or an international organisation.¹ In the case of an individual mediator, the mediator should be a person who is impartial, has high moral authority and is intelligent in the sense that he is equipped with diplomatic skills. On some occasions, international organisations have been involved in mediation, such as the UN, the Organisation of American States (OAS) and the World Bank. In addition, the States that are in dispute have to agree in the first place on the intervention of mediators, either by requesting the mediator to act or else the mediator offers its assistance. But what makes mediation different from good offices is the degree of involvement of the mediator in the resolution process. Basically, mediation involves the *active* participation of the mediator as opposed to the passive role of providing good offices.² The notion that mediators are involved in active participation arises from the fact that mediators not only bring the parties together but they will advance proposals and suggestions as part of the process and the parties to the disputes may adopt such proposals as a basis for further negotiations.³ In this sense, the mediator is acting as a formulator who tries to find a formula for assisting the parties in settling the dispute themselves.⁴ Mediation is

¹ See Art. 4 of the two Hague Conventions—the 1899 International Convention for the Pacific Settlement of International Disputes (adopted 29 July 1899, entered into force 4 September 1900) 187 CTS 410 and the 1907 International Convention for the Pacific Settlement of International Disputes (adopted 18 October 1907, entered into force 26 January 1910) 205 CTS 233—which provide that ‘the part of mediator consists in reconciling the opposing claims and appeasing the feeling of resentment which may have arisen between the states at variance’.

² See Francisco Orrego Vicuña, ‘Mediation’ in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2010), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e61?rskey=VHJ6bY&result=1&prd=EPIL>> accessed 27 June 2016. See also John Collier and Vaughan Lowe, *The Settlement of Disputes in International Law: Institutions and Procedures* (OUP 2000) 27.

³ Darwin suggests that there are two kinds of functions of a mediator: 1) The procedural function and 2) The substantive function. While the former is concerned with bringing the parties to the negotiating table, the latter involves a solution to the substance of the dispute see H.G. Darwin, ‘Mediation and Good Offices’ in Humphrey Waldock (ed), *International Disputes: The Legal Aspects, Report of a Study Group of the David Davies Memorial Institute of International Studies* (Europa Publication 1972) 85-86.

⁴ Touva Saadia and William Zartman, ‘Introduction: Mediation in Theory’ in Touva Saadia and William Zartman (eds), *International Mediation in Theory and Practice* (Westview Press 1985) 12. The tasks of the mediator are varied. The mediators can be hosts, observers, facilitators, educators, manipulators, or advocates. See Martti Ahtisaari and Kristiina Rintakoski, ‘Mediation’ in Andrew F.

normally conducted in terms of confidentiality with a view to protecting the parties from public interference.⁵ It can be considered that mediation is a mechanism that helps the parties to continue to settle their disputes by means of negotiations.

Before the mediator is able to make any proposals leading to a settlement of the dispute, the mediator has to get acquainted with the substance of the dispute. Usually, the parties will supply the information to the mediator or else his knowledge of the facts is limited to what the mediator may have acquired from the news rather than formally inquiring into the facts underlying the dispute.⁶ After gathering all the information, the mediator will come up with a possible solution which will take into account the essential interests of the parties and be acceptable to all the parties with a view to changing the disputants' perceptions of their behaviour.⁷ It should be noted that the mediation process is flexible; therefore the mediator can employ various kinds of techniques that depend largely on the nature of the disputes and the willingness of each party to settle the dispute.⁸ If one party is reluctant or hinders the process, the mediator may use diplomatic techniques such as exerting pressure on a party by explaining to such a party the adverse consequences there might occur if it refuses to settle the dispute or telling the parties of what are the benefits that they might get if concessions are made.⁹

1.1.2 The Use of Mediation to Settle International Environmental Disputes—An Overview

Mediation has been recognised as one of the means of settlement of international environmental disputes. This is reflected in the dispute settlement clause which can be

Cooper, Jorge Heine and Ramesh Thakur (eds), *The Oxford Handbook of Modern Diplomacy* (OUP 2013) 341.

⁵ Vicuña (n 2).

⁶ J. G. Merrills, *International Dispute Settlement* (5 edn, CUP 2011) 26.

⁷ See generally in Jacob Bercovitch and Ayse Kadayifci, 'Exploring the Relevance and Contribution of Mediation to Peace-Building' (2002) 9 PCS 21.

⁸ Jacob Bercovitch, *Theory and Practice of International Mediation: Selected Essays* (Routledge 2011) 18-19. There are several conditions which make mediations successful: see Jacob Bercovitch, 'International Mediation and Dispute Settlement: Evaluating the Conditions for Successful Mediation' (1991) 7 NJ 17. See also Lawrence Susskind and Eileen Babbitt, 'Overcoming Obstacles to Effective Mediation of International Disputes' in Jacob Bercovitch and Jeffrey Rubin (eds), *Mediation in International Relations: Multiple Approaches to Conflict Management* (Saint Martin's Press 1992).

⁹ Merrills states that powerful States are usually requested to act as mediators because they have the ability to induce the parties' behaviour by using the strength of their own position, see Merrills (n 6) 35.

found in several MEAs.¹⁰ It is in the nature of mediation that it is often not publicised, so that it is difficult to know how widely mediation has been used to settle environmental disputes. The only example of mediation concerning an environmental dispute of which the author is aware was the Indus waters dispute between India and Pakistan.¹¹ The sharing and managing of international watercourses lies at the heart of this dispute between the two countries, since India has discontinued its policy of allowing the flow of water to Pakistan. In this case, the President of the World Bank at first offered his good offices and the parties accepted the offer.¹² Although the World Bank offered good offices to the parties but the act of the World Bank was actually mediation, since it actively participated in the negotiation process by advancing the proposals to settle the dispute. The continuation of its active involvement in the case was one of the successes of the World Bank in settling the dispute.¹³ Finally, the parties managed to settle their dispute on the basis of one of the plan proposed and signed the Indus Waters Treaty with the World Bank acting as a signatory of the Treaty.¹⁴ In addition, the World Bank also offered financial assistance based largely on its lending programs for the purpose of the implementation of the Treaty.

¹⁰ Examples include Art. XVIII of the African Convention on the Conservation of Nature and Natural Resources (adopted 11 July 2003, not yet in force); Art. 11 (2) Vienna Convention for the Protection of the Ozone Layer (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTS 293, 26 ILM 1529; Art. 26 of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (adopted 9 April 1992, entered into force 17 January 2000) 2099 UNTS 197; Art. 16 of the Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matter (adopted 7 November 1996, entered into force 24 March 2006) 36 ILM 1; Art. 27 (2) of the CBD and Art. 33 (2) of the Watercourses Convention.

¹¹ See generally in Charles Rousseau, 'Le Conflit sur les Eaux de l'Indus' (1961) 65 RGDIP 364; Niranjana Das Gulhati, *Indus Waters Treaty: An Exercise in International Mediation* (Allied Publishers 1973); Salman M.A. Salman, 'Mediation of International Water Disputes—The Indus, the Jordan and the Nile Basins Interventions' in Laurence Boisson de Chazournes, Christina Leb and Mara Tignino (eds), *International Law and Freshwater: The Multiple Challenges* (Edward Elgar Publishing 2013).

¹² See Georges Fischer, 'La Banque Internationale pour la Reconstruction et le Développement et l'Utilisation des Eaux de l'Indus' (1960) 6 AFDI 669; G.T. Keith Pitman, 'The Role of the World Bank in Enhancing Cooperation and Resolving Conflict on International Watercourses: The Case of the Indus Basin' in Salman M.A. Salman and Laurence Boisson de Chazournes (eds), *International Watercourses: Enhancing Cooperation and Managing Conflict* (The World Bank 1998) 160.

¹³ Salman M.A. Salman, 'Good Offices and Mediation and International Water Disputes' in The International Bureau of the Permanent Court of Arbitration (ed), *Resolution of International Water Disputes: Papers Emanating from the Sixth PCA International Law Seminar November 8, 2002* (Kluwer International Law 2003) 187. See also Richard Baxter, 'The Indus Basin' in Richard Baxter, Ludwick A. Teclaff and Eileen Teclaff (eds), *The Law of International Drainage Basins* (Oceana Publications 1967).

¹⁴ For the text of the Treaty see the 1960 Indus Waters Treaty (adopted 19 September 1960, entered into force 12 January 1961) 491 UNTS 126 (hereinafter the Indus Waters Treaty). See also Asit K. Biswas, 'Indus Water Treaty: The Negotiating Process' (1992) 17 WI 201.

1.2 Conciliation

1.2.1 Conspectus: The Nature of Conciliation

Cot defines international conciliation as ‘intervention in the settlement of an international dispute by a body having no political authority of its own, but enjoying the confidence of the parties to the dispute and entrusted with the task of investigating every aspect of the dispute and of proposing a solution which is not binding on the parties’.¹⁵ The important task of conciliators is to investigate and examine the facts that are in dispute. Conciliators undertake in-depth and impartial investigations or studies of the details of a dispute.¹⁶ The way in which conciliators acquire information is in contrast to the methods of mediators in that mediators usually receive information from the parties rather than from their own investigations. Due to the fact that conciliators have to investigate several aspects of disputes, such as the facts and their historical, political and legal aspects,¹⁷ conciliators are selected on the basis of their particular fields of expertise.¹⁸ The investigation process may include hearing the parties’ claims and objections and examining witnesses and experts. After the investigation process, conciliators will provide solutions to the dispute in the form of non-binding recommendations.¹⁹ However, the parties are free to refuse the proposed report if they see fit.

Conciliation has formal procedures which, to some degree, similar to judicial means of dispute settlement. Such characteristics of conciliation lead Cot to state that conciliation is ‘a half-breed’ means of dispute settlement.²⁰ Although conciliation shares several similarities with mediation, such as the recommendatory nature of the

¹⁵ Jean-Pierre Cot, *International Conciliation* (Rollo H. Myers tr, Europa 1972) 9. See also Lassa Oppenheim, *International Law*, vol 2 (Hersch Lauterpacht ed, 7 edn, Longmans 1952); Sven M.G. Koopmans, *Diplomatic Dispute Settlement: The Use of Inter-State Conciliation* (T.M.C. Asser Press 2008) 37.

¹⁶ See the conciliation rules proposed by Henri Rolin in Henri Rolin, ‘La Conciliation Internationale’ (1961) 49 AIDI 193. See also the Revised General Act for the Pacific Settlement of International Disputes (28 April 1949) 71 UNTS 101.

¹⁷ Cot (n 15) 9. See also D.W. Bowett, ‘Contemporary Developments in Legal Techniques in the Settlement of Disputes’ (1983) 180 *Recueil des Cours* 169, 186.

¹⁸ Koopmans (n 15) 48.

¹⁹ See Art. 21 of UNGA Res 50/50 ‘UN Model Rules for the Conciliation of Disputes Between States’ (29 January 1996) UN Doc A/RES/50/50.

²⁰ Jean-Pierre Cot, ‘Conciliation’ in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e20?rskey=akWKeS&result=1&prd=EPIL>> accessed 27 June 2016. Lee also notes that conciliation has a hybrid character combining inquiry and mediation. See Roy S. Lee, ‘A Case for Facilitation in the Settlement of Disputes’ (1991) 34 *German Ybk Intl L* 138, 148.

final proposals, conciliation entails a formal process of finding a solution with a view to settling disputes. Moreover, the investigative powers of conciliators are unlike the powers of inquiry commissions. Whereas conciliators will expose the facts only to the extent that such exposure will not bring any difficulties to the conciliation process, the most important purpose of an inquiry commission's function is to illuminate the dispute.²¹

Conciliation can be in the form of 'permanent commissions' or '*ad hoc* commissions'.²² The permanent commissions can exist either by virtue of the agreement of the parties in bilateral treaties or as part of an international organisation.²³ On the contrary, *ad hoc* conciliation commissions are the type of commissions that are normally included in a specific treaty as one of the dispute settlement mechanisms. In addition, some *ad hoc* conciliation takes the form of the parties agreeing to resort to conciliation only after a dispute has arisen and they have failed to settle it by other means such as the *Jan Mayen* conciliation.²⁴ Conciliators may be selected from a list of experts that has been set up beforehand, when a dispute arises under specific treaties. It should be noted that conciliators are never nominated by themselves in contrast to mediation where the parties to the dispute may appoint mediators or mediators may offer their assistance.

Conciliation can be optional or compulsory. Optional conciliation entails a system in which the parties have established a conciliation procedure beforehand and the parties will decide whether to use it or not. On the other hand, compulsory conciliation refers to a system where 'jurisdiction is granted in the original agreement, and therefore a commission can unilaterally be seized'.²⁵ Consequently, the parties to the dispute have an obligation to participate in the conciliation proceedings in good faith.²⁶

²¹ Merrills (n 6) 66.

²² Art. 1 of the 1961 Resolution of the Institut de Droit International, Institut de Droit International 'Resolution on International Conciliation' (1961) 49 AIDI 385.

²³ For example, the UNESCO Conciliation and Good Offices Commission on Discrimination in Education, see Protocol Instituting a Conciliation and Good offices Commission to be Responsible for Seeking the settlement of any Disputes which may Arise between States Parties to the Convention against Discrimination in Education (adopted 12 December 1962, entered into force 24 October 1968) 651 UNTS 362.

²⁴ See Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen: Report and Recommendations to the Government of Iceland and Norway (Decision of June 1981) 27 RIAA 1, 8-9.

²⁵ Koopmans (n 15) 55. Tullio Treves, 'Recent Trends in the Settlement of International Dispute' in *Cursos Euro-Mediterráneos Bancaja de Derecho Internacional*, vol 1 (Aranzadi 1997) 415-416.

²⁶ See for example in Art. 5 of Annex II to the CBD and Art. 14 (6) of the UNFCCC.

1.2.2 The Use of Conciliation to Settle International Environmental Disputes— An Overview

Both mandatory and optional conciliation can be found in MEAs.²⁷ For example, mandatory conciliation is provided for by, for example, UNCLOS, the UNCCD, the CBD, the Vienna Convention for the Protection of the Ozone Layer and the UNFCCC;²⁸ while provision for optional conciliation is made in the OSPAR Convention.²⁹ Progressive conciliation rules are provided by the Permanent Court of Arbitration (PCA), i.e. its Optional Rules for Conciliation of Disputes Relating to Natural Resources and/or the Environment, which were adopted in 2002.³⁰ These rules contain features that are adapted to handling environmentally related disputes such as the initiation of procedures by non-state actors and the appointment of conciliators with expertise in environmental matters.³¹ There have been no cases settled by conciliation.

1.3 Inquiry

1.3.1 Conspectus: The Nature of Inquiry

In a case where the parties are in dispute about factual issues, inquiry may itself settle these issues by creating a basis for the parties to settle their dispute.³² It involves an objective investigation or elucidation of the facts that give rise to the dispute by a

²⁷ Philippe Sands and Ruth Mackenzie, 'Guidelines for Negotiating and Drafting Dispute Settlement Clauses for International Environmental Agreements' in The International Bureau of the Permanent Court of Arbitration (ed), *International Investments and Protection of the Environment: The Role of Dispute Resolution Mechanisms* (2001) 314-315.

²⁸ Art. 297 (3) (b) of UNCLOS; Art. 27 (4) of the CBD; Art. 11 (4) of the Vienna Convention for the Protection of the Ozone Layer; Art. 14 (5)-(7) of the UNFCCC; Art. 28 (6) of the Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (adopted 17 June 1994, entered into force 26 December 1996) 1954 UNTS 3.

²⁹ Art. 32 of the 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (adopted 22 September 1992, entered into force 25 March 1998) (1993) 32 ILM 1068 (hereinafter the OSPAR Convention).

³⁰ Hereinafter the PCA's Environmental Rules for Conciliation, for the full text see <https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-Conciliation-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf> accessed 17 February 2014. See also D. Ratliff 'The PCA Environmental Arbitration and Conciliation Rules' (2004) 1 TDM 1, available at <www.transnational-dispute-management.com> accessed 19 February 2014.

³¹ See the para. (i) of the Introductory Part of the PCA Conciliation Rules. The details will be discussed in a later chapter.

³² Richard M. Mosk, 'The Role of Facts in International Dispute Resolution' (2003) 304 *Recueil des Cours* 9, 32-33. See also Collier and Lowe (n 2) 24; Karl Josef Partsch, 'Fact-Finding and Inquiry' in *Encyclopedia of Public International Law* (Elsevier 1997) 61.

third party, either an impartial individual or a commission.³³ Inquiry may be understood in two different senses. Firstly, it may be used in addition to and form part of the other means of dispute settlement whether these are non-judicial or judicial means.³⁴ Secondly, it is, according to Merrills, ‘a specific institutional arrangement’ that States prefer to opt for because they want to have some disputed issue independently investigated rather than seeking some other means of dispute settlement.³⁵ The ways in which these inquiry bodies obtain or collect the necessary information may vary depending on the function assigned to them. These may include, for example, hearing all the claims of the parties, examining witnesses or visiting the disputed area.³⁶ After acquiring all the evidence, the commission may only clarify the disputed facts and submit a written report for the further use of the parties. Not only does it submit the report to the parties, the commission may also suggest a relevant solution for the parties. It should be noted that if the commission also suggests a solution for the parties, the distinction between inquiry and mediation or conciliation cannot be easily drawn.³⁷ The outcome of the process of inquiry is non-binding and the parties concerned are free to accept or reject the findings.³⁸ However, in the process of inquiry under Article 5 of Annex VIII to UNCLOS, the outcome of the process shall be considered as *conclusive* as between the parties.³⁹ Although the outcome is not binding upon the parties, it can have some consequences if the inquiries are made public. Edith Brown Weiss interestingly observes that ‘by letting the “sun” shine on the facts, civil society, as well as governments and other actors, will be pressed to take appropriate actions’.⁴⁰

³³ See Art. 9 of the 1907 Hague Convention for the Pacific Settlement of Disputes.

³⁴ Agnieszka Jachec-Neale, ‘Fact-Finding’ in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2011), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e27?rskey=GHXa8S&result=1&prd=EPIL>> accessed 27 June 2016. See also Nissim Bar-Yaacov, *The Handling of International Disputes by Means of Inquiry* (OUP 1974) 2.

³⁵ Merrills (n 6) 41.

³⁶ UN, *Handbook on the Peaceful Settlement of Disputes between States* (UN Publication 1992) 28.

³⁷ *Ibid*, 28.

³⁸ Lucius Caflisch, ‘Cent Ans de Règlement Pacifique des Différends Interétatiques’ (2001) 288 *Recueil des Cours* 245, 278.

³⁹ Art. 5 (1) provides that ‘The parties to a dispute concerning the interpretation or application of the provisions of this Convention relating to (1) fisheries (2) protection and preservation of the marine environment, (3) marine scientific research, or (4) navigation, including pollution from vessels and by dumping, may at any time agree to request a special arbitral tribunal constituted in accordance with article 3 of this Annex to carry out an inquiry and establish the facts giving rise to the dispute.’

⁴⁰ Edith Brown Weiss, ‘The Evolution of International Water Law’ (2007) 331 *Recueil des Cours* 163, 285.

1.3.2 The Use of Inquiry to Settle International Environmental Disputes—An Overview

Inquiry is listed among the means of dispute settlement in several MEAs.⁴¹ Compulsory inquiry can be found in the Watercourses Convention.⁴² It is the situation where traditional means of dispute settlement have been resorted to and unsuccessful in resolving a dispute in this case the disputants can invoke unilaterally the compulsory inquiry procedure stipulated in Article 33 (3)-(9) of the Watercourses Convention.

Considering the practice of inquiry in settling international environmental disputes, the only two examples of inquiry that the author have come across were a dispute concerning the construction of India's Baglihar hydroelectric dam on the Chenab River between Pakistan and India and the construction of the Danube-Black Sea Deep Water Navigation Route between Ukraine and Romania. The first case was referred to Professor Raymond Lafitte, a neutral Swiss civil engineer appointed by the World Bank.⁴³ The investigation process began in July 2005 and came to an end in February 2007. During that period the parties submitted formal written complaints which were reminiscent of the process of judicial means of dispute settlement, namely the submission of a Memorial, a Counter-Memorial, a Reply and a Rejoinder to the neutral expert.⁴⁴ The neutral expert proposed six technical solutions in response to Pakistan's stance, including, *inter alia*, a maximum design flood and level of power

⁴¹ See, for example, Art. XIII of the FAO International Plant Protection Convention (adopted 6 December 1951, entered into force 3 April 1952) 150 UNTS 67; Art. 11-12 of the Convention on the Protection of the Environment between Denmark, Finland, Norway and Sweden (adopted 19 February 1974, entered into force 5 October 1976) 1902 UNTS 279, 13 ILM 511; Art. 3 (7) of the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (adopted 25 February 1991, entered into force 10 September 1997) 1989 UNTS 309 (hereinafter the Espoo Convention); Art. 26 (2) of the Convention on the Cooperation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins (adopted 20 November 1998, entered into force 31 June 2000); Art. 5 of Annex VIII to UNCLOS; and Art. 33 (3)-(9) of the Watercourses Convention.

⁴² Art. 33 (3) of the Watercourses Convention.

⁴³ Pakistan requested that an expert need be appointed by the World Bank and on 15 May 2005 it agreed upon the appointment of the neutral expert. See also Art. IX (2) of the Indus Waters Treaty. It should be noted that Sands and Peel view that this dispute was settled by conciliation, see Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (3 edn, CUP 2013) 161-162.

⁴⁴ See Raymond Lafitte, 'Baglihar Dam and Hydroelectric Plant: Expert Determination on Points of Difference Referred by the Government of Pakistan under the Provisions of the Indus Waters Treaty' (2007) 2, reprinted at <<http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1171996340255/BagliharSummary.pdf>> accessed 16 February 2014.

intake.⁴⁵ He also, in his final determination, confirmed the Indians' rights to construct gated spillways under the treaty. The outcome was accepted by both parties.⁴⁶

The second dispute arose under the Espoo Convention. The dispute was related to the construction and use of the Danube-Black Sea Deep Water Navigation Route between Ukraine and Romania.⁴⁷ In this case, Ukraine approved the project of adjustment for navigation of the Bystroe channel which is situated in the Danube Delta. The project involved the dredging and deepening works that Romania, the neighbouring State, expressed concern in relation to the negative environmental impact of the project. Thus, by the initiation of Romania, the Inquiry Commission was established in accordance with Article 3 (7) and Annex No. IV of the Espoo Convention with the task to find whether or not there was significant adverse transboundary impact of the dredging in the Danube River and the dumping of dredged spoil on riparian land or at a dump site offshore at sea.⁴⁸ The Commission found that there had been a likelihood of significant adverse transboundary impacts. It also proposed measures to mitigate the environmental impacts such as the introduction of modern dredging and dumping techniques.⁴⁹

⁴⁵ See generally in Salman M.A. Salman, 'The Baglihar Difference and Its Resolution Process - A Triumph for the Indus Waters Treaty?' (2008) 10 WP 105.

⁴⁶ See further in chapter 5, section 2.1.2.1.

⁴⁷ Espoo Inquiry Commission, Report on the Likely Significant adverse Transboundary Impacts of the Danube Black-Sea Navigation Route at the Border of Romania and Ukraine (2006), reprinted at <<http://www.unece.org/fileadmin/DAM/env/eia/documents/inquiry/Final%20Report%2010%20July%202006.pdf>> accessed 17 February 2014 (hereinafter the Report of the Espoo Inquiry Commission).

⁴⁸ Art 3 (7) provides that 'if those Parties cannot agree whether there is likely to be a significant adverse transboundary impact, any such Party may submit that question to an inquiry commission in accordance with the provisions of Appendix IV to advise on the likelihood of significant adverse transboundary impact.

⁴⁹ See further in chapter 5, section 2.1.2.2.

2. JUDICIAL MEANS OF DISPUTE SETTLEMENT IN THE FIELD OF INTERNATIONAL ENVIRONMENTAL LAW

2.1 Arbitration

2.1.1 Conspectus: The Nature of Arbitration

Arbitration can be described as ‘the settlement of differences between States by *judges of their own choice and on the basis of respect for law*’.⁵⁰ The disputing parties submit their dispute to arbitral tribunals either jointly by the virtue of a special agreement (*compromis*) concluded between them after the emergence of a dispute or by one party unilaterally referring the dispute to arbitration under a dispute settlement clause in an existing bilateral or multilateral treaty providing for the settlement of future disputes. The parties retain a high degree of control over the process of settling their dispute. This can be seen from the power of the parties to form an arbitral tribunal, the freedom of the parties to choose the procedures to be followed in the arbitration process and the choice of law applicable to the case.⁵¹ This leads Holtzmann to observe that the essence of the nature of arbitration is ‘party autonomy’.⁵² In addition, the awards rendered by arbitrators are legally binding as between the parties who are obliged to implement them in good faith.⁵³

2.1.2 The Use of Arbitration to Settle International Environmental Disputes—An Overview

It is common for MEAs to include arbitration as one of the array of dispute settlement mechanisms.⁵⁴ Interestingly, in UNCLOS, arbitration plays an important role as the default procedure in a case when the parties to a dispute have not made a choice of the dispute settlement mechanisms that are available under Article 287 (1) or if they have

⁵⁰ See the *Treaty of Lausanne (Frontier between Turkey and Iraq)* (Advisory Opinion) PCIJ Rep Series B. No 12, 26.

⁵¹ M.C.W. Pinto, ‘The Prospects for International Arbitration: Inter-State Disputes’ in A.H.A. Soons (ed), *International Arbitration: Past and Prospects* (Martinus Nijhoff Publishers 1990) 92.

⁵² Howard M. Holtzmann, ‘Some Reflections on the Nature of Arbitration’ (1993) 6 LJIL 265, 266.

⁵³ ILC, ‘Report of the International Law Commission Covering the Work of its 5th Session (1 June - 14 August 1953)’ UN Doc A/CN.4/Ser. A/1953/Add. 1, YbILC, 1953, Vol. II, 202. See also Oscar Schachter, ‘The Enforcement of International Judicial and Arbitral Decisions’ (1960) 54 AJIL 1, 2.

⁵⁴ See, for example, Art. 14 (2) (b) of the UNFCCC; Art. 27 (3) (a) and Annex II Part 1 of the CBD; Art. 32 (1) of the OSPAR; Art. 33 (2) of the Watercourses Convention; and Art. 287 (1), Annex VII and VIII to UNCLOS. Arbitration may be the only mechanism after the dispute cannot be settled by negotiation see Art.13 and Annex B of the Convention on the Protection of the Rhine Against Pollution by Chlorides (adopted 3 December 1976, entered into force 1 February 1979) 16 ILM 242.

not chosen the same procedure: in such cases, the dispute shall be submitted to an ordinary arbitral tribunal under Annex VII.⁵⁵ If both States parties to a dispute concerning fisheries or protection and preservation of the marine environment have chosen Annex VIII as a means of settlement, the case will be brought to special arbitral tribunal for the purpose of ensuring that such marine environmental disputes may be handled by a tribunal composed of members who are selected on the basis of their environmental expertise.⁵⁶

Arbitration has been used to settle several environmental disputes since the nineteenth century. International environmental arbitration may be divided into three types depending on the will of the parties, which can be described as follows:

2.1.2.1 *Ad Hoc* Arbitration

There appear to have been four *ad hoc* arbitrations of environmental disputes. The *Bering Sea Fur-Seals Arbitration* between the UK and the US dealt with the right to protect fur seals on the high seas,⁵⁷ the *Trail Smelter Arbitration* between Canada and the US with the emissions from smelters causing air pollution,⁵⁸ the *Lac Lanoux Arbitration* between France and Spain which dealt with the utilisation of the waters of Lake Lanoux⁵⁹ and the *Iron Rhine Railway Arbitration* with the issue of the reactivation of a railway line from Belgium to Germany via the Netherlands.⁶⁰

2.1.2.2 Arbitration Constituted in Accordance with Annex VII of the UNCLOS

There have been four arbitrations of marine environmental disputes since UNCLOS entered into force in 1994. The subject matter of these disputes are Japan's unilateral Experimental Fishing Programme which was contrary to the Convention for the Conservation of Southern Bluefin Tuna in the *Southern Bluefin Tuna* cases,⁶¹ the construction and operation of the mixed oxide fuel (MOX) plant in the *MOX Plant* case,⁶² the effects of land reclamation works having a significant impact on the marine environment in the *Land Reclamation* case.⁶³ Annex VII arbitration was

⁵⁵ Art. 287 (3) of UNCLOS.

⁵⁶ Art. 1-2 of Annex VIII to UNCLOS.

⁵⁷ See further in chapter 5, section 2.1.3.1 (1)

⁵⁸ See further in chapter 5, section 2.1.3.1 (2)

⁵⁹ See further in chapter 5, section 2.1.3.1 (3)

⁶⁰ See further in chapter 5, section 2.1.3.1 (4)

⁶¹ See further in chapter 5, section 2.1.5.2 (1)

⁶² See further in chapter 5, section 2.1.5.2 (2). It should be noted that in this case the PCA acted as the registry.

⁶³ See further in chapter 5, section 2.1.5.2 (3). The PCA also served as the registry.

resorted to in the case which was concerned with the establishment of a marine protected area (MPA) in the *Chagos Archipelago* case. One of the points of disagreement was that the establishment of MPA around the Chagos Archipelago declared by the UK in which Mauritius argued that such declaration was contrary to obligations under UNCLOS, since the UK was not a coastal State.⁶⁴ It should be pointed out that of the four UNCLOS arbitrations, only the *Chagos MPA Arbitration* case resulted in a decision on the merits. The tribunal found that it lacked jurisdiction in the *Southern Bluefin Tuna* case; Ireland eventually withdrew its application in the *MOX Plant* case; and the parties reached an out of court settlement in the *Land Reclamation* case.

In 2016, the Annex VII Arbitral Tribunal rendered its decision in the South China Sea matter. In this case, one of the Philippines' submissions was concerned with the protection and preservation of the marine environment.⁶⁵ The Philippines alleged that China had violated several environmental obligations set out in UNCLOS since it had engaged in the harvesting of endangered species (giant clams).⁶⁶ Since China failed to prevent such harmful activities, the Arbitral Tribunal held that it has breached its obligations under Article 192 and 194 (5) of UNCLOS.⁶⁷ Moreover, China also engaged in the land reclamation and construction of artificial islands, installations and structures in such a way as to pollute the marine environment and caused damage to the coral reef ecosystem which, in the view of the Arbitral Tribunal, China had breached Articles 192, 194 (1) and 194 (5) UNCLOS.⁶⁸ China had also failed to cooperate and coordinate with the other States bordering the South China Sea with regard to the protection and preservation of the marine environment and failed to communicate of the potential effects of the activities on the marine environment. Thus, China had not fulfilled its obligation under Article 206 of UNCLOS.⁶⁹

⁶⁴ *Chagos MPA Arbitration*, Memorial of Mauritius, Vol 1, paras.1.15 and 7.98.

⁶⁵ *In the Matter of the South China Sea Arbitration (Philippines v. China)* (Award) (2016) (hereinafter the *South China Sea Arbitration*), electronic version available at <https://pca-cpa.org/wp-content/uploads/sites/175/2016/07/PH-CN-20160712-Award.pdf> (accessed 22 November 2016).

⁶⁶ *Ibid*, para. 817.

⁶⁷ *Ibid*, para. 964.

⁶⁸ *Ibid*, para. 983.

⁶⁹ *Ibid*, para. 991.

2.1.2.3 Non-UNCLOS Disputes Referred Unilaterally to Arbitration

There have been two arbitrations of environmental disputes.⁷⁰ In 2003, there was a dispute between the UK and Ireland concerning the access to environmental information as defined by OSPAR Convention.⁷¹ By denying Ireland access to the full reports concerning the authorisation of a new nuclear facility so as to hinder Ireland to be able consider the impacts which the MOX plant might have on the marine environment, it claimed that the UK had breached its obligation under Article 9 (2) of the OSPAR Convention.⁷² Recently, the arbitral tribunal has rendered its awards in the case concerning the allocation of the waters of the Indus River in the *Indus Waters Kishenganga Arbitration*, the first arbitration since the conclusion of the Indus Waters Treaty. The dispute was about the interpretation of the Indus waters which the tribunal was required to determine whether India had breached its obligations with regard to India's hydro-electric project and the inter-tributary transfer and bring the reservoir level of a run-of-river Plant below Dead Storage Level.⁷³

2.2 International Courts

2.2.1 Conspectus: The Nature of International Courts

The parties to a dispute may submit their claims to be decided by a pre-established and permanent international judicial institution, whether they are at a global or a regional level. Tomuschat provides four criteria for determining the qualification of being an international tribunals that are: 1) tribunals have to apply law 2) the law to be applied is international law 3) judges should be independent and 4) judgments of international courts are final and are legally binding upon the parties.⁷⁴ There are two

⁷⁰ It should be noted that there was the *Rhine Chloride* arbitration concerning the calculation of the costs of pollution control amongst all the riparian States of the Rhine. This case will not be discussed because the central of the dispute was not primary about the protection of the environment.

⁷¹ *Dispute Concerning Access to Information under Article 9 of the OSPAR Convention between Ireland and the United Kingdom of Great Britain and Northern Ireland (Ireland v. UK)* (2003) 23 RIAA 59 (hereinafter *OSPAR Arbitration*). See further in chapter 5, section 2.1.3.3 (1).

⁷² Art. 9 (2) requires States parties to make available information 'on the state of the maritime area [and] on activities or measures adversely affecting or likely to affect it'.

⁷³ *Indus Waters Kishenganga Arbitration*, para. 2. See further in chapter 5, section 2.1.3.3 (2).

⁷⁴ See Christian Tomuschat, 'International Courts and Tribunals with Regionally Restricted and/or Specialized Jurisdiction' in Max Planck Institute for Comparative Public Law and International Law (ed), *Judicial Settlement of International Disputes: International Court of Justice, Other Courts and Tribunals, Arbitration and Conciliation* (Springer Verlag 1974) 290-311. It should be noted that Tomuschat's four criteria apply equally to arbitral tribunals. The crucial distinction between arbitral

international courts with the competence to deal with international environmental disputes—the ICJ and the ITLOS. In resorting to international courts, a dispute is to be judged by impartial persons who are not selected by the parties just as they please (with an exception in the case of judge *ad hoc*). In contradistinction to arbitral rules in which the parties may choose or modify the rules of the procedure, normally the rules of international courts cannot be changed by the parties; therefore, the cases will be heard in accordance with the detailed procedures established by an international legal instruments in advance. For the rules of the ITLOS, however, the parties may propose modifications or additions to such rules for their particular case, albeit within certain limits.⁷⁵

As far as the jurisdiction of international courts is concerned, the consent of the parties is still essential for them to have the jurisdiction to rule on the merits of a dispute.⁷⁶ In the case of the ICJ, States may conclude a special agreement referring their dispute to the Court, or they may give general consent to the settlement of a category of international disputes by means of an optional clause declaration, so that the parties automatically accept the Court's jurisdiction in relation to any dispute of that category or those categories that arises in the future.⁷⁷ In addition, the jurisdiction of the courts can be based on compromissory clauses provided for in particular treaties that are in force.⁷⁸ For the ITLOS, the jurisdiction comprises all disputes and all applications submitted to the ITLOS in accordance with UNCLOS or in any case submitted pursuant to any other agreement conferring jurisdiction on the ITLOS which is accepted by all the parties to that case.⁷⁹

For the ICJ, only States can be parties to contentious cases.⁸⁰ On the contrary, the jurisdiction of the ITLOS is not limited to States, but includes jurisdiction over all States parties to UNCLOS, which include three non-State parties, viz. the EU, Cook

tribunals and international courts is that the latter are permanent bodies with pre-appointed judges and a pre-determined procedure. See also Art. 59-60 of the ICJ Statute.

⁷⁵ Art. 48 of the Rules of the ITLOS, ITLOS/8 (17 March 2009) (adopted 27 April 2005) reprinted in *International Tribunal for the Law of the Sea, Basic Texts* (Martinus Nijhoff Leiden 2005) 15.

⁷⁶ *Status of Eastern Carelia* (Advisory Opinion) PCIJ Rep Series B No 5, 27.

⁷⁷ Art. 36 (2)-(5) of the ICJ Statute. There are 70 States, at the time of writing, which had accepted the compulsory jurisdiction of the ICJ, available at <<http://www.icj-cij.org/jurisdiction/index.php?p1=5&p2=1&p3=3>> accessed 13 March 2014.

⁷⁸ Art. 36 (1) of the ICJ Statute

⁷⁹ Art. 286 and Arts. 20 and 21 of Annex VI of UNCLOS.

⁸⁰ Art. 34 of the ICJ Statute.

Islands and Niue.⁸¹ With regard to disputes over areas beyond national jurisdiction, the Sea-Bed Disputes Chamber not only must have jurisdiction over disputes between States but it can also settle a dispute between States which are party to the UNCLOS and the International Seabed Authority (the Authority).⁸² Furthermore, the Enterprise and natural or juridical persons may also have a standing, either as plaintiffs or defendants, before this Chamber.⁸³

There is also a possibility for third party intervention, under certain circumstances, in the ICJ and the ITLOS.⁸⁴ The participations of third party States in the proceedings is based on the fact that their legal interests may be affected by the decision in the case (discretionary intervention) or the interpretation of an international agreement to which third party States are also a party (intervention as of right).⁸⁵

During the course of the proceedings, international courts may, upon the request of one party, issue provisional measures with a view to preserving the rights of either party, for the sake of preventing actions that might involve irreparable consequences before the conclusion of the proceedings or, as in the case of the ITLOS, preventing serious harm to the environment or the fish stocks.⁸⁶

2.2.2 The Use of International Courts to Settle International Environmental Disputes—An Overview

2.2.2.1 The International Court of Justice (ICJ)

The first environmental case was the *Nuclear Tests* cases which were brought before the Court in 1973. In this case, an environmental aspect can be seen from the

⁸¹ See for more details in Tullio Treves, 'International Organization As Parties to Contentious Cases: Selected Aspects' in Cesare Romano, Laurence Boisson de Chazournes and Ruth MacKenzie (eds), *International Organizations and International Dispute Settlement: Trends and Prospects* (Transnational Publishers 2002) 39-43.

⁸² Art. 187 of UNCLOS.

⁸³ Art. 187 (c) of UNCLOS.

⁸⁴ Art. 62-63 of the ICJ Statute; Art. 81-86 of the 1978 Rules of the ICJ (adopted 14 April 1978, entered into force 1 July 1978); Art. 31 and 32 of the Annex VI to UNCLOS.

⁸⁵ See more details in Andreas Zimmermann, 'International Courts and Tribunals: Intervention in Proceedings' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006) online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e37?rskey=y9t0G9&result=1&prd=EPIL>> accessed 27 June 2016.

⁸⁶ Art. 41 of the ICJ Statute, Art. 291 (1) of UNCLOS, Art. 31 (2) of the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (adopted 4 August 1995, entered into force 11 December 2001) 2167 UNTS 3 (hereinafter the 1995 Agreement).

arguments put forward by Australia and New Zealand in relation to French atmospheric nuclear testing. According to Australia, the radioactive contamination of the environment, such as the soil, the waters of the oceans, lakes, rivers, reservoirs and vegetation, may be considered a result of the atmospheric testing of nuclear weapons.⁸⁷ The Court found the case to be inadmissible as there was no dispute due to France's unilateral undertaking to cease atmospheric nuclear testing.⁸⁸ Twenty-one years after the Court delivered its judgment in 1974, France resumed nuclear tests which provoked New Zealand to institute proceedings against France again in 1995 with a view to requesting the Court to examine the situation concerning tests on the basis of paragraph 63 of the ICJ's 1974 judgment.⁸⁹ It alleged that without the EIA having been undertaken, the underground nuclear tests were illegal in international law and they might cause an adverse effect to the marine environment.⁹⁰ However, the Court found that the 1974 case was concerned with atmospheric tests whereas the 1995 case was concerned with underground nuclear tests, so the Court dismissed the case on the basis that paragraph 63 of the 1974 Judgment had not been affected.⁹¹ In 1989 the *Nauru* case was brought before the Court in relation to the effects of phosphate mining on the island of Nauru.⁹² It alleged in its Memorial that Australia, as a Trusteeship Authority, had caused 'the systematic destruction of the Nauruan environment' by phosphate mining.⁹³ Nevertheless, the case was settled by diplomatic negotiations in which Nauru received \$107 million Australian dollars and assistance from Australia.⁹⁴ Therefore, neither of the cases discussed so far did the Court have to apply international environmental law or settle the dispute.

The *Gabčíkovo-Nagymaros* case between Slovakia and Hungary might also be considered as an international environmental case, since one of the essential point was

⁸⁷ 1974 *Nuclear Tests* cases, (ICJ Pleadings), Vol 1, 3, 5-7.

⁸⁸ 1974 *Nuclear Tests* cases, para. 65. See further in chapter 5, section 2.1.4.1 (1).

⁸⁹ *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v. France)* Case (Order) [1995] ICJ Rep 288 (hereinafter 1995 *Nuclear Test* case). Para. 63 reads as follows 'However, the Court observes that if the basis of this Judgment were to be affected, the Applicant could request an examination of the situation in accordance with the provisions of the Statute'.

⁹⁰ 1995 *Nuclear Test* case, Further Request for the Indication of Provisional Measures by New Zealand, para. 4.

⁹¹ 1995 *Nuclear Test* case, para. 68 (1).

⁹² *Case Concerning Certain Phosphate Lands in Nauru (Nauru v. Australia)* (Preliminary Objections) [1992] ICJ Rep 240 (hereinafter *Nauru* case).

⁹³ See *Nauru* case, Memorial of the Republic of Nauru, Vol.1, para. 100 and Memorial of the Republic of Nauru, ICJ Pleadings, Vol 1 paras. 206-213.

⁹⁴ Agreement between Australia and the Republic of Nauru for the Settlement of the Case in the International Court of Justice concerning certain Phosphate Lands in Nauru (1993) 32 ILM 1474.

concerned with the failure of Slovakia to respect the environmental obligations contained in Article 15 of the 1977 Treaty, in the sense that the construction of the dams might, as Hungary argued, have adverse effects on the ecosystem of the Danube River.⁹⁵ Hungary could therefore suspend or abandon certain works by invoking a state of ecological necessity.⁹⁶ Briefly, the Court held that Hungary could not convince the Court that there was a real grave and imminent peril so that it could not invoke a state of ecological necessity to justify its failure to comply with its treaty obligations.⁹⁷

International disputes concerning the environment continue to burgeon in the ICJ, as can be seen in the *Pulp Mills* case between Argentina and Uruguay concerning the authorisation of Uruguay to construct pulp mills which, as Argentina asserted, violated Uruguay's obligations to prevent pollution and protect the quality of the waters of the River Uruguay and its ecosystem provided in the 1975 Statute of the River Uruguay.⁹⁸ The central issue of this case was whether or not Uruguay had breached its procedural obligations, such as its obligation to inform, notify and negotiate and fulfill its substantive obligations, such as the obligation to act with due diligence. The Court held that Uruguay had breached its procedural obligations but not its substantive obligations.⁹⁹

Transboundary pollution was also at issue in the *Aerial Herbicide Spraying* case between Ecuador and Colombia. In this case, Ecuador argued that the conduct of Colombia in spraying herbicides to destroy coca and poppy plantations in the border area had caused damage to people, plants, animals, indigenous communities and the environment of Ecuador.¹⁰⁰ However, this case was settled by means of negotiations and was removed from the list.¹⁰¹

⁹⁵ See *Gabčíkovo-Nagymaros* case, Memorial of the Republic of Hungary, Vol. 1, paras. 7.17-7.21. See further in chapter 5, section 2.1.4.1.

⁹⁶ *Gabčíkovo-Nagymaros* case, para. 39.

⁹⁷ *Ibid*, paras. 54, 57.

⁹⁸ See *Pulp Mills* case, Memorial of Argentina, Vol.1, 120-138. See further in chapter 5, section 2.1.4.1.

⁹⁹ *Pulp Mills* case, para. 282.

¹⁰⁰ *Aerial Herbicide Spraying* case, Memorial of Colombia, paras. 6.54-6.134.

¹⁰¹ *Aerial Herbicide Spraying* case, (Order) [2013], reprinted at <<http://www.icj-cij.org/docket/files/138/17528.pdf>> accessed 23 March 2014. See also the Agreement concluded between two countries, reprinted at <http://www.cancilleria.gov.co/sites/default/files/Litigio%20Nicaragua-Col/acuerdo_firmado.pdf> accessed 23 March 2014.

The *Whaling* case between Australia and Japan, with New Zealand intervening, was also an environmental case concerning the protection of whales.¹⁰² In this case, Australia asserted that Japan had failed to observe its obligation under the International Convention for the Regulation of Whaling not to kill whales for commercial purposes by conducting the research programme called JARPA II.¹⁰³ The most recent environmental cases in the ICJ are the *Construction of a Road in Costa Rica along the San Juan River* case instituted by Nicaragua against Costa Rica and the *Certain Activities carried out by Nicaragua in the Border Area* case instituted by Costa Rica against Nicaragua. In the first case, Nicaragua contended that Costa Rica's construction of a road running parallel and in extremely close proximity to the southern bank of the San Juan River threatened to destroy its fragile ecosystem, including the adjacent biosphere reserves and internationally-protected wetlands.¹⁰⁴ The Court held that the construction of road caused a risk of significant transboundary harm so that Costa Rica was required to carry out an EIA.¹⁰⁵ In the second case, Costa Rica claimed that the ongoing and planned dredging and the construction of the canal carried out by Nicaragua would seriously affect the flow of water to the San Juan River, including the wetlands and the national wildlife protected areas located in the region, which is contrary to the obligations contained in the 1971 Ramsar Convention.¹⁰⁶ The Court held that there was no risk of significant transboundary harm to the River.¹⁰⁷

2.2.2.2 The International Tribunal for the Law of the Sea (ITLOS)

The ITLOS has had only one environmental dispute referred to it—the *Swordfish* case. The case was concerned about fisheries for swordfish but the ITLOS did not give a judgment on the merits because the case was settled by the parties and withdrawn.¹⁰⁸ The ITLOS has made orders of provisional measures under Article 290 (5) in three cases referred to arbitration—the *Southern Bluefin Tuna* cases, the *MOX Plant* case and the *Land Reclamation* case. The *Southern Bluefin Tuna* cases concerned an issue relating to a high seas fisheries dispute. The provisional

¹⁰² See chapter 2, section 3.1.3.

¹⁰³ *Whaling* case, Memorial of Australia, Vol.1, 3.

¹⁰⁴ *Certain Activities/Construction of a Road* cases, Memorial of Nicaragua, Vol.1, 149-151.

¹⁰⁵ *Certain Activities/Construction of a Road* cases, para. 156.

¹⁰⁶ *Certain Activities/Construction of a Road* cases, Memorial of Costa Rica, Vol.1, 202.

¹⁰⁷ *Certain Activities/Construction of a Road* cases, para. 105.

¹⁰⁸ See chapter 2, section 3.1.1.

proceedings were considered by the ITLOS pending the constitution of an Annex VII tribunal. In this case, Australia and Japan argued that Japan's conducting of a unilateral Experimental Fishing Programme (EFP) in 1998 and 1999 had violated its obligations under the UNCLOS which deal with cooperation over the conservation of highly migratory species.¹⁰⁹ Australia and New Zealand asked the ITLOS to prescribe provisional measures and the ITLOS issued provisional measures in August 1999 by ordering the parties *inter alia* to refrain from conducting any EFP and to resume negotiations without delay.¹¹⁰

In the *MOX Plant* case and the *Land Reclamation* case, the ITLOS also played an important role in prescribing provisional measures. For the first case, the ITLOS held that Ireland and the UK shall cooperate and consult with each other with a view to exchanging information, monitoring risks or effects of the operation of the MOX plant and devising measures to prevent pollution of the marine environment.¹¹¹ For the second case, the ITLOS, like the MOX plant case, ordered the parties, *inter alia*, to cooperate and enter into consultations in order to establish a group of experts to conduct a study with regard to the effects of land reclamation and to propose measures to deal with any adverse effect arising from land reclamation.¹¹²

3. NON-COMPLIANCE PROCEDURES

3.1 Conspectus: The Nature of Non-Compliance Procedures

A number of MEAs have established groundbreaking treaty-based compliance mechanisms known as Non-Compliance Procedures (NCPs) in addition to conventional dispute settlement clause. According to the UNEP's Guidelines on Compliance with and Enforcement of MEAs, NCPs can be perceived as '*a vehicle to identify possible situations of non-compliance at an early stage and the causes of non-compliance, and to formulate appropriate responses including, addressing and/or*

¹⁰⁹ ITLOS, *Pleadings, Minutes of Public Sitzings and Documents* (Martinus Nijhoff Publishers 2004) 17, 82, *Southern Bluefin Tuna Cases* (Statement of Claim and Grounds on Which It Is Based, 15 July 1999).

¹¹⁰ *Southern Bluefin Tuna cases*, paras. 90 (d) and (e)

¹¹¹ *MOX Plant case*, para. 89.

¹¹² *Land Reclamation case*, para. 106.

correcting the state of non-compliance without delay'.¹¹³ The objectives of NCPs, as Fitzmaurice describes them, 'involve the treatment of compliance, and the effects of non-compliance, with treaty obligations in a different manner to that which has been traditional in international law'.¹¹⁴

NCPs deal with two situations: 1) A situation where the parties have the potential to be in a state of non-compliance with their obligations and 2) a situation where the parties have actually breached their substantive obligations set out in the MEAs and the other parties or treaty bodies raise such breach before NCPs under the condition that the State alleged to be in non-compliance does contest that allegation. The first situation is concerned with dispute avoidance whereas the second situation is concerned with dispute settlement. It is only the second situation that falls within the scope of this study. NCPs can be found in several MEAs which deal with, for example, marine environment protection,¹¹⁵ marine pollution prevention,¹¹⁶ endangered species protection,¹¹⁷ wildlife and natural habitats,¹¹⁸ air pollution,¹¹⁹ ozone protection,¹²⁰ climate change,¹²¹ hazardous wastes,¹²² hazardous pesticides,¹²³

¹¹³ See para. 14 (d) (2) of the Guideline on Compliance with and Enforcement of MEAs, reprinted at <<http://www.unep.org/delc/Portals/119/UNEP.Guidelines.on.Compliance.MEA.pdf>> accessed 5 April 2014.

¹¹⁴ Malgosia Fitzmaurice, 'International Protection of the Environment' (2001) 293 *Recueil des Cours* 9, 348.

¹¹⁵ Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (adopted 10 June 1995, entered into force 9 July 2004) Legal basis for establishing the procedure: Art. 18, 27; Decision IG 17/2: Procedures and mechanisms on compliance under the Barcelona Convention and its Protocols, UNEP(DEPI)/MED IG.17/10 Annex V.

¹¹⁶ Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (adopted 13 November 1972, entered into force 30 August 1975) 1046 UNTS 138; Legal basis for establishing the procedure: Art. 11; Procedures and Mechanisms Pursuant to Art. 11 of the 1996 Protocol to the London Convention 1992, Doc. LC 29/17(14 December 2007), Annex 7 (hereinafter the London NCP).

¹¹⁷ CITES; Legal basis for establishing the procedure: Art. XII, XIII; with Appendices I–III; Resolution Conf. 11.3 (Rev. CoP16) and Resolution Conf. 14.3 (hereinafter the CITES NCP).

¹¹⁸ Convention on the Conservation of European Wildlife and Natural Habitats (adopted 19 September 1979, entered into force 1 June 1982) 1284 UNTS 209; Legal basis for establishing the procedure: Art 13–14; Decision T-PVS (93) 22 Implementation of the Bern Convention: Opening and Closing of Files and Follow-Up of Recommendations (3 November 1993).

¹¹⁹ LRTAP; Legal basis for establishing the procedure: Art. 2 (a), Report of the 14th Session of the Executive Body, Decision 1997/2 on the Implementation Committee, Its Structure and Functions and Procedures for Review of Compliance, Doc. ECE/EB.AIR/53 (7 January 1998), Annex III, 28–31. See also the amendment in Decision 2006/2 on the Implementation Committee, its Structure and Functions and Procedures for Review of Compliance, Doc. ECE/EB.AIR/89/Add.1 (5 February 2007), 4 (hereinafter the LRTAP NCP).

¹²⁰ Vienna Convention for the Protection of the Ozone Layer (Ozone Convention) (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTS 324; and its Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol) (adopted 16 September 1987, entered into force 1 January 1989) 1522 UNTS 3; Legal basis for establishing the procedure: Art. 8; Report of the 4th Meeting of the MOP, UNEP/OzL.Pro.4/15, Annex IV (25 November 1992, 44–46 and amended by

EIA,¹²⁴ access to environmental information,¹²⁵ watercourses,¹²⁶ biosafety,¹²⁷ and plant genetic resources.¹²⁸

The special characteristics of NCPS that can be distinguished from the other forms of non-judicial and judicial means of dispute settlement mentioned in the above sections may be identified as follows:

Firstly, NCPs are usually established, as specific subsidiary bodies of MEAs, by a Conference of the Parties (COP),¹²⁹ a Meeting of the Parties (MOP)¹³⁰ or by the

Decision X/10, Report of the 10th Meeting of the MOP, UNEP/OzL.Pro.10/9 (3 December 1998) 23-24 (hereinafter Montreal NCP).

¹²¹ The UNFCCC (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 and the Kyoto Protocol; Legal basis for establishing the procedure: Art. 18; Decision 24/CP.7 Report of the COP of the UNFCCC, FCCC/CP/2001/13/Add.3 (21 January 2002) 64-77, and see Decision 27/CMP.1 FCCC/KP/CMP/2005/8/Add.3 (30 March 2006) 92-103 (hereinafter the Kyoto NCP).

¹²² Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)(done 22 March 1989, entered into force 5 May 1992) 1673 UNTS 57; Legal basis for establishing the procedure: Art. 15 (5)(e); COP Decision VI/12, UNEP/CHW.6/40 (10 February 2003) 45-50 (hereinafter the Basel NCP).

¹²³ Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (done 10 September 1998, entered into force 24 February 2004) 2244 UNTS 337; Legal basis for establishing the procedure: Art. 17; Decision RC-3/4 Draft text of the Procedures and Mechanisms on Compliance with the Rotterdam Convention, Doc. UNEP/FAO/RC/COP.3/26 (10 November 2006), Annex, 27 (pending) (hereinafter the Rotterdam NCP).

¹²⁴ Espoo Convention; and its Protocol on Strategic Environmental Assessment to the Espoo Convention (SEA Protocol) (adopted 21 May 2003, not yet entered into force); Legal basis for establishing the procedure: Art 11 (2); Decision II/4 on Review of Compliance, Doc. ECE/MP.EIA/4 (7 August 2001), Annex IV, 72-76 which was revised by Decision III/2 on Review of Compliance, Doc. ECE/MP.EIA/6 (13 September 2004), Annex II (hereinafter the Espoo NCP).

¹²⁵ Aarhus Convention; Legal basis for establishing the procedure: Art. 15; Decision I/7 on Review of Compliance, Doc. ECE/MP.PP/2/Add.8 (2 April 2004) as amended by Decision II/5 on General Issue of Compliance, Doc. ECE/MP.PP/2005/2/Add.6 and its Protocol on Pollutant Release and Transfer Registers (Kiev Protocol) (adopted 21 May 2003, entered into force 8 October 2009); Legal basis for establishing the procedure: Art. 22; Decision I/2 on Review of Compliance, Doc. ECE/MP.PRTR/2010 (20-22 April 2010) (hereinafter the Aarhus NCP).

¹²⁶ Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted 17 June 1999, entered into force 4 August 2005) 38 ILM 1708; Legal basis for establishing the procedure: Art. 15 of the Protocol; Decision I/2 on Review of Compliance, Doc. ECE/MP.WH/2/Add.3 – EUR/06/5069385/1/Add.3 (3 July 2007) (hereinafter the Water and Health NCP).

¹²⁷ Cartagena Protocol on Biosafety to the CBD (Cartagena Protocol)(done 29 January 2000, entered into force 11 September 2003) 2226 UNTS 208; Legal basis for establishing the procedure: Art. 34; Decision BS-I/7, Report of the 1st Meeting of the COP, Doc. UNEP/CBD/BS/COP-MOP/1/15 (27 February 2004), Annex I, 98-101 (hereinafter the Cartagena NCP).

¹²⁸ International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)(signed 3 November 2001, entered into force 31 March 2004), 2400 UNTS 303; Legal basis for establishing the procedure: Art. 19 (3)(e), 21; Report of the 4th Session of the Governing Body of the ITPGRFA IT/GB-4/11/Report, Resolution 2/2011 Procedures and Operational Mechanisms to Promote Compliance and Address Issues of Non-Compliance, Appendix A.2 (hereinafter the ITPGRFA NCP).

¹²⁹ See for example Art.18 of the Kyoto Protocol which states that ‘The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol...’.

¹³⁰ See Art. 15 of the Aarhus Convention which provides that the MOP shall establish the NCP.

Governing Body of the treaty.¹³¹ In some cases, however, the COP/MOP itself may be assigned to monitor the State parties' compliance.¹³² In this sense, non-compliance issues will be handled by a mechanism that can be conceived as a collective response system to a State's non-compliance or a multilateral supervision by the parties.¹³³ Due to the fact that NCPs are established as part of particular MEAs, NCPs are some kind of 'internal compliance control procedure'¹³⁴ or 'endogenous enforcement'¹³⁵ as opposed to a third party dispute settlement which can be viewed as external procedure.

Secondly, NCPs can be characterised as 'non-confrontational' means to ensure, facilitate and promote compliance with the obligations set out in the MEAs.¹³⁶ Apart from this non-confrontational character, they may also be described as non-adversarial, cooperative, non-judicial or legally non-binding mechanisms. The underlying idea of the establishment of the NCPs is that sometimes the source of non-compliance may come not from the unwillingness of States to comply but their inability to comply due to lack of the necessary technical expertise or resources.¹³⁷ Therefore, NCPs are designed to assist the relevant non-complying parties to return to compliance rather than incriminating non-complying parties. That is to say, insofar as NCPs deal with disputes, they provide mechanisms that are softer than traditional adjudicative means of dispute settlement which are adversarial and confrontational in

¹³¹ See Art. 21 of ITPGRFA. See general discussion concerning institutional arrangements in MEAs in Robin Churchill and Geir Ulfstein, 'Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law' (2000) 94 AJIL 623, 628, 643-647.

¹³² See, for example, Art. 23 (4) of the CBD; and Art. XI (3) of the CITES.

¹³³ Geir Ulfstein, 'Dispute Resolution, Compliance Control and Enforcement in International Environmental Law' in Geir Ulfstein, Thilo Marauhn and Andreas Zimmermann (eds), *Making Treaties Work: Human Rights, Environment and Arms Control* (OUP 2007) 132; Susana Borràs Pentinat, 'Comparative Analysis of Selected Compliance Procedures under Multilateral Environmental Agreements' in Sandrine Maljean-Dubois and Lavanya Rajamani (eds), *La Mise en Oeuvre du Droit International de l'Environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011) 328; Alan Boyle and James Harrison, 'Judicial Settlement of International Environmental Disputes: Current Problems' (2013) 4 JIDS 245, 257.

¹³⁴ Günther Handl, 'Compliance Control Mechanisms and International Environmental Obligations' (1997) 5 Tulane J Intl & Comp L 29, 32.

¹³⁵ Antonio Cardesa-Salzmänn, 'Constitutionalising Secondary Rules in Global Environmental Regimes: Non-Compliance Procedures and the Enforcement of Multilateral Environmental Agreements' (2012) 24 JEL 103, 111.

¹³⁶ Rüdiger Wolfrum, 'Means of Ensuring Compliance with and Enforcement of International Environmental Law' (1998) 272 Recueil des Cours 9, 110.

¹³⁷ Ronald Mitchell, 'Compliance Theory: An Overview' in James Cameron, Jacob Werksman and Peter Roderick (eds), *Improving Compliance with International Environmental Law* (Earthscan Publications 1996) 12; Abram Chayes and Antonia H. Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (HUP 1995) 13-14. See also para. 5 of the Guideline on Communications from the Public published by the MOP to the Protocol on Water and Health which it clearly states that 'The general assumption is that a situation of non-compliance with the Protocol by a Party is not the result of its intention to breach the Protocol's provisions.'

character.¹³⁸ The treaty bodies whose duty is to address the non-compliance issue may have a variety of names, such as the compliance committee,¹³⁹ implementation committee¹⁴⁰ and standing committee.¹⁴¹ Although they have different names, their duties are similar, that is, to deal with compliance with treaty obligations ‘aimed at furthering the implementation’ of the MEAs.¹⁴² Compliance bodies can vary in the nature, size and qualification of the members. All the contracting parties may be members of these compliance bodies.¹⁴³ In some cases, the members are not States but legal, scientific or economic experts sitting in a personal capacity.¹⁴⁴ Even NGOs and industry members can also become members.¹⁴⁵

3.2 The Use of Non-Compliance Procedures—An Overview

In this section, only non-compliance proceedings that are initiated by States against other States will be reviewed (non-compliance proceedings triggered by non-State entities and treaty institutions will not be discussed), since they fall within the meaning of international environmental disputes provided in this thesis.

3.2.1 The Espoo Convention

In 2007 Romania alleged that Ukraine had failed to make available to Romania the EIA documentation concerning the Bystroe which was likely to have a significant adverse transboundary impact on the environment and that this amounted to non-compliance by Ukraine with its obligations under the Convention and Ukraine denied that it was in non-compliance.¹⁴⁶ The Implementation Committee (IC) found that Ukraine had failed to comply fully with Article 2 (2) of the Espoo Convention by not

¹³⁸ Malgosia Fitzmaurice and Catherine Redgwell, ‘Environmental Non-Compliance Procedures and International Law’ (2000) 31 *Netherlands Ybk Intl L* 35, 39.

¹³⁹ As in Kyoto Protocol.

¹⁴⁰ As in LRTAP.

¹⁴¹ As in CITES.

¹⁴² Tullio Treves, ‘Introduction’ in Tullio Treves and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreement* (T.M.C. Asser Press 2009) 2.

¹⁴³ See, for example, the Bureau of the Ramsar Convention and the Standing Committee of the Bern Convention.

¹⁴⁴ See, for example, the Barcelona Convention Compliance Committee; the Compliance Group of London Protocol; the Kyoto Compliance Committee; and the Aarhus Compliance Committee.

¹⁴⁵ See, for example, the Committee of the World Heritage Convention and the International Review Panel of the Dolphin Conservation Agreement.

¹⁴⁶ MOP4 (2008) *Romania v. Ukraine* (Findings and recommendations further to a submission by Romania regarding Ukraine (EIA/IC/S/1)) [27 February 2008] ECE/MP.EIA/2008/6, para. 6. See further in chapter 5, section 2.1.5.1 (1).

providing a sufficiently clearly regulatory framework in terms of the information concerning the decisions for approving the activities and EIA procedures.¹⁴⁷

In 2009, Ukraine submitted a complaint to the IC alleging that Romanian activities related to inland waterways in the Romanian sector of the Danube Delta, such as the dumping of dredged materials into the river, caused significant adverse impacts on the environment of the territory of Ukraine, as well as on related ecosystem components which fall under Appendix I to the Espoo Convention (item 9).¹⁴⁸ Ukraine denied those allegations. The IC found that Romania had not breached this obligation because the submission by Ukraine proved to be unsubstantiated.¹⁴⁹ However, even though there was no existence of non-compliance, the IC urged the parties to enhance bilateral cooperation for the protection of the Danube Delta.¹⁵⁰

There was a dispute between Azerbaijan and Armenia which was concerned with the planned building of nuclear power station located in Armenia. Azerbaijan alleged that Armenia had failed to comply with its obligations under Articles 3 (5)¹⁵¹ and (8),¹⁵² 4 (2),¹⁵³ 5,¹⁵⁴ and 6¹⁵⁵ of the Convention since it terminated the EIA procedure under the Convention and proceeded with the decision-making on such planned project. However, the IC found that Armenia was not in non-compliance with those Articles but it was in non-compliance with Article 3 (1) instead because it failed to notify Azerbaijan as early as possible and no later than when informing its own public with respect to the proposed project.¹⁵⁶ The MOP to the Espoo Convention adopted such findings and requested the IC to follow up and monitor the case.¹⁵⁷

¹⁴⁷ Ibid, paras. 59-60.

¹⁴⁸ Report of the Implementation Committee on Its Eighth Session (Findings and recommendations further to a submission by Ukraine regarding Romania (EIA/IC/S/2)) *Ukraine v Romania* [23-25 March 2010] ECE/MP.EIA/IC/2010/2, para. 11.

¹⁴⁹ Ibid, para. 51.

¹⁵⁰ Ibid, para. 54.

¹⁵¹ Art. 3 (5) requires the Party of origin to provide with relevant information regard the EIA procedure and proposed activity to the affected Party.

¹⁵² Art. 3 (8) requires the Party concerned to ensure that the public of the affected Party be informed of the proposed activity.

¹⁵³ Art. 4 (2) requires the Party of origin to furnish the affected Party with the EIA documentation.

¹⁵⁴ Art. 5 requires the Party of origin to enter into consultations with the affected Party on the basis of the EIA documentation.

¹⁵⁵ Art. 6 requires the Parties to ensure that, in the final decision on the proposed activity, due account is taken of the outcome of the EIA, including the EIA documentation and the Party of origin shall provide to the affected Party the final decision on the proposed activity along with the reasons and considerations on which it was based.

¹⁵⁶ Report of the Implementation Committee on its Twenty-Sixth Session, ECE/MP .EIA/IC/2012/6, Annex I (19 December 2012) para. 51.

¹⁵⁷ Decision VI/2, Part III/A, ECE/MP .EIA/2014/L.3 (21 March 2014), para. 46.

In 2011, Lithuania triggered the NCP against Belarus with regard to its non-compliance in which the former alleged that the latter's construction of the nuclear power plant had breached its obligations to properly complete the EIA procedures under Articles 2 (2),¹⁵⁸ (6),¹⁵⁹ 4 (1)-(2)¹⁶⁰, 5 (a),¹⁶¹ and 6 (1)-(2). The IC found that Belarus was in non-compliance with its obligations under Article 2 (6), Article 4 (2), Article 5 (a) and Article 6 (1) (2), of the Convention.¹⁶²

A dispute emerged again between Azerbaijan and Armenia but this time Armenia raised the issue of non-compliance to the IC. Armenia alleged that Azerbaijan was in non-compliance with its obligations under Article 2 (4)¹⁶³ and Article 3 (1)¹⁶⁴ as well as several paragraphs of MOP decision when it carried out six oil and gas projects. However, the IC found that Azerbaijan was not in non-compliance with its obligations with respect to the projects.¹⁶⁵

3.2.2 The Aarhus Convention

There has so far been only one case where the proceedings were triggered by a State party against another States party. This case was also about the approval by Ukraine of the construction of a deep-water navigational canal (the so-called Bystroe Canal project) in the Danube Delta and its potential to harm a nature conservation area of national and international importance.¹⁶⁶ Romania claimed that it had not participated in the decision-making procedures during any of the phases of the project. In addition, Romania argued further that by 'failing to ensure that the public affected in the Danube Delta was informed early in the decision-making procedure about the fact that the project was subject to a national and transboundary environmental impact assessment procedure', Ukraine had breached Article 6 (2) (e) of the Convention.¹⁶⁷ The Implementation Committee found that Ukraine had breached its obligations by

¹⁵⁸ Art. 2 (2) is concerned with the implementation the Convention by adopting the necessary legal, administrative or other measures with respect to the prosed activity, establishing of an EIA procedure

¹⁵⁹ Art. 2 (6) is concerned with the opportunity of the public in the areas likely to be affected to participate in relevant EIA procedures regarding proposed activities.

¹⁶⁰ Art. 4 (1)-(2) is concerned with the preparation of the EIA documentation.

¹⁶¹ Art. 5 (a) is concerned with the consultation on the basis of the EIA documentation.

¹⁶² See further in chapter 5, section 2.1.5.1 (2).

¹⁶³ Art. 2 (4) is concerned with general obligation for the Party of origin to ensure that affected Parties are notified of proposed activities.

¹⁶⁴ Art 3 (1) is concerned with Obligation to notify.

¹⁶⁵ Report of the Implementation Committee on its Twenty-Eighth Session, ECE/MP .EIA/IC/2013/4, Annex (1 November 2013), para. 78.

¹⁶⁶ Submission ACCC/S/2004/01 *Romania v. Ukraine* (Finding and Recommendation) [14 March 2005] ECE/MP.PP/C.1/2005/2/Add.3. See further chapter 5, section 2.1.5.2

¹⁶⁷ Ibid, para. 4. Art 6 is concerned with public participation in decisions on specific activities.

failing to provide for public participation in the EIA and environmental decision-making procedures for projects. It recommended Ukraine to submit a strategy indicating the measures it would take to bring its legislation and practice into compliance with these obligations.¹⁶⁸

4. RFMO PANELS

This kind of dispute settlement mechanism is concerned with the conservation and sustainable use of straddling and highly migratory fish stocks which are regulated by the 1995 UN Fish Stocks Agreement. To this end, there exist the international bodies constituted in order to manage fish stocks. This is a form of cooperation among States which have fishing interests in particular regions of the high seas to establish regional fisheries management organisations (RFMOs).¹⁶⁹ Some of these focus particularly on highly-migratory species.¹⁷⁰

Generally, RFMOs have a regulatory power to prescribe conservation and management measures, such as catch limits or technical measures for conserving fish stocks, which are binding on their member States. In many RFMOs, the conservation and management measures that are adopted by RFMO commissions may be objected to by member States.¹⁷¹ Consequently, such measures are not binding on the objecting members. This kind of option is called an objection procedure which is different among various RFMOs in terms of the details concerning the objecting periods and the procedures that are subsequently taken by the objecting States. The latter issue is considered further in this section. This is because a particular dispute is an

¹⁶⁸ Ibid, para. 41.

¹⁶⁹ For example, the South East Atlantic Fisheries Organisation (SEAFO), the North Atlantic Salmon Conservation Organization (NASCO), the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) and the General Fisheries Commission for the Mediterranean (GFCM); for more information see Tore Henriksen, Geir Hønneland and Are K. Sydnes, *Law and politics in ocean governance : the UN Fish Stocks Agreement and regional fisheries management regimes* (Martinus Nijhoff Publishers 2006); Robin Churchill and Daniel Owen, *The EC Common Fisheries Policy* (OUP 2010) 112-118; Margaret A. Young, *Trading Fish, Saving Fish: The Interaction between Regimes in International Law* (CUP 2011) 38-46; Yoshinobu Takei, *Filling Regulatory Gaps in High Seas Fisheries: Discrete High Seas Fish Stocks, Deep-sea Fisheries and Vulnerable Marine Ecosystems* (Martinus Nijhoff Publishers 2013).

¹⁷⁰ Those RFMOs are the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Indian Ocean Tuna Commission (IOTC), the Inter-American Tropical Tuna Commission (IATTC), the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) and the Western and Central Pacific Fisheries Commission (WCPFC).

¹⁷¹ See the discussions relating to the objection procedure in Howard S. Schiffman, *Marine Conservation Agreements: The Law and Policy of Reservations and Vetoes* (Martinus Nijhoff Publishers 2008); Ted L. McDorman, 'Implementing Existing Tools: Turning Words Into Actions—Decision-Making Processes of Regional Fisheries Management Organisations (RFMOs)' (2005) 20 *JMCL* 423.

environmental one, since the essence of the dispute is concerned with the conservation of marine resources and the objecting State may claim that the conservation and management measures of the RFMO commissions are being adopted in ways that are inconsistent with environmental obligations enshrined in the international law of the sea. Another form of dispute is that another RFMO member may challenge the alternative measures that the objecting State proposes to adopt as not being compatible with the RFMO Convention or UNCLOS. This could also be viewed as an environmental dispute, particularly if the proposed alternative measures threaten the sustainability of a fish stock as will be discussed later in the next section.

4.1 Conspectus: The Nature of RFMO Panels

After a dispute arises, there is a kind of dispute settlement mechanism that exists in some RFMOs. A dispute has to or may be brought to a panel to review an objection and the compatibility of the decision adopted by the RFMO commissions with the treaties establishing RFMOs, UNCLOS or the Fish Stocks Agreement.¹⁷² To date, this kind of dispute settlement mechanism exists in four RFMO conventions.¹⁷³ These are:

- 1) The Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean (SPRFMO Convention)¹⁷⁴
- 2) The Convention on Future Multilateral Cooperation in North-East Atlantic Fisheries (NEAFC Convention)¹⁷⁵

¹⁷² Robin Churchill, 'Trends in Dispute Settlement in the Law of the Sea: Towards the Increasing Availability of Compulsory Means' in Duncan French, Matthew Saul and Nigel D. White (eds), *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010) 159.

¹⁷³ There are also not dissimilar mechanisms in other RFMOs, viz. North Pacific: review by commission itself, possibly assisted by two advisers (Art. 9); the South East Atlantic Fisheries Organisation (SEAFO): review by the commission itself, plus option to refer to an *ad hoc* panel (Art. 23-24 of the Convention on the Conservation and Management of Fisheries Resources in the South East Atlantic Ocean); Inter-American Tropical Tuna Commission (IATTC): technical disputes to non-binding *ad hoc* expert panel (Art. XXV (3) of the Antigua Convention); General Fisheries Commission for the Mediterranean (GFCM): Disputes to 3-person committee, decisions non-binding (Art. 19 of the Agreement for the Establishment of the GFCM).

¹⁷⁴ SPRFMO Convention (adopted 14 November 2009, entered into force 24 August 2012); The legal basis for establishing a Review Panel: Art. 17 (5) and Annex II; the text of the Convention is available at <<http://www.sprfmo.int/assets/Convention-SPRFMO.pdf>> accessed 29 November 2014.

¹⁷⁵ NEAFC Convention (18 November 1980, entered into force 17 March 1982) 1285 UNTS 129; Amendments to the NEAFC Convention have been adopted in 2004 and 2006 by the NEAFC Commission, Contracting Parties have agreed to use the New Convention on a provisional basis (pending ratification); The legal basis for establishing an *ad hoc* review panel appears in chapter 8 of the Rules of Procedure of the North East Atlantic Fisheries Commission (NEAFC) adopted at the 32nd Annual Meeting, November 2013 and Annex 1 to these Rules of Procedures; the text of the Convention and the Rules of Procedures are available at <<http://www.neafc.org/rules/dispute-settlement>> accessed 29 November 2014.

3) The Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (NAFO Convention)¹⁷⁶

4) The Convention for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPF Convention)¹⁷⁷

Thus, the discussion in this section and the analysis of the suitability of such panels for settling environmental disputes in the next chapter will be centred on those RFMO conventions.

As far as the nature of such panels is concerned, they are not pre-established or permanent institutions like international courts. There are two ways in which panels may be established. Firstly, they are set up within a certain period of time after an objection is presented by a member of a commission, irrespective of the parties' wishes, so that this makes it similar to a compulsory dispute settlement mechanism. This is a special case that can be found only in the SPRFMO Convention.¹⁷⁸ Secondly, considering the non-compulsory language used in the text of the convention, it may be established voluntarily by the parties to a dispute.¹⁷⁹ The other three RFMOs take this approach. In this sense, it is akin to the establishment of arbitration in cases where States still have the freedom to decide whether to submit a dispute to arbitration.

The results of a dispute take in the form of findings, reports or recommendations. Normally recommendations cannot be said to have a binding quality which the parties have to abide by, but they can choose whether or not to adopt such recommendations like the recommendations proposed by mediators or conciliators. The binding force of the recommendations of the RFMO panels may

¹⁷⁶ NAFO Convention (24 October 1978, entered into force 1 January 1979) 1135 UNTS 369; The legal basis for establishing an *ad hoc* panel: Art XIV (7), XV (3) and Annex II to the Convention which was amended at 29th Annual Meeting—28 September 2007, NAFO/GC Doc.07/4, Serial No. N5453. (The amended Convention has not yet entered into force); the text of the Convention is available at <<http://www.nafo.int/about/frames/convention.html>> accessed 29 November 2014.

¹⁷⁷ WCPF Convention (adopted 5 September 2000, entered into force 19 June 2004) 2275 UNTS 43; The legal basis for establishing a review panel: Art 20 (6) and Annex II to the Convention; The text of the Convention is available at <<http://www.wcpfc.int/system/files/text.pdf>> accessed 29 November 2014.

¹⁷⁸ See Art. 17 (5) which provides that 'a Review Panel *shall be established* within 30 days after the end of the objection period.' (emphasis added).

¹⁷⁹ Rather than using the phrase 'shall be established', the other three conventions use optional language; chapter 8 (1) (c) of the NEAFC Convention uses the phrase 'may refer the dispute to an *ad hoc* panel'; Art. XIV (7) of the NAFO Convention uses the phrase 'may at the same time submit the matter to ad hoc panel proceedings' and the WCPF Convention uses the phrase 'may...seek a review of the decision by a review panel'.

differ from one another depending on how the draftsmen of the particular RFMO Conventions would like to give power to the RFMO panels. The binding force of the RFMO's recommendations can be categorised into three levels: 1) absolutely binding, 2) binding subject to certain conditions and 3) non-binding.

The first category comprises the WCPF Convention. It provides that if the review panel finds that the decisions of the Commission need to be modified, amended or revoked, the Commission *shall*, at its next annual meeting, modify or amend its decision 'in order to conform with the findings and recommendations of the review panel'.¹⁸⁰

The second type of binding force can be found in the SPRFMO Convention. For the SPRFMO review panel, not every case requires that the findings and recommendations must be binding upon the objecting member/s of the Commission and the SPRFMO Commission depending on the will of the objecting State/s and the Extraordinary Meeting of the Commission, as will described below. In a case where a review panel finds that the decisions of the SPRFMO Commission have resulted in unjustifiable discrimination against the objecting States and the review panel recommends that the alternative measures proposed by the objecting State/s should be modified¹⁸¹ or the review panel recommends totally new measures,¹⁸² if the objecting State/s decide to adopt the measures recommended by the review panel then these measures shall be deemed to be binding. What can be seen is that the measures recommended by the review panel are binding subject to the adoption of the objecting State/s otherwise, if they do not agree with the recommendations, they can choose not to adopt and institute the dispute settlement proceedings under the SPRFMO Convention instead. The binding force in this kind of case can be said to be a half-breed mechanism which is a mixture of arbitration and conciliation, but it has a tendency to have a larger proportion of arbitration. As Churchill comments 'by giving the recommendations of the review panel binding force in this way, paragraph 10 (c) of Annex II of the SPRFMO Convention makes proceedings of the review panel much closer to arbitration than the conciliation process they initially appear'.¹⁸³

¹⁸⁰ Art. 20 (9) of the WCPF Convention.

¹⁸¹ Annex II (10) (b) to the SPRFMO Convention.

¹⁸² Annex II (10) (c) to the SPRFMO Convention.

¹⁸³ Robin Churchill, 'Dispute Settlement in the Law of the Sea: Survey for 2013' (2015) 30 IJMCCL 1, 52.

In addition, the findings and recommendations may not become binding if the objecting State/s request an Extraordinary Meeting of the Commission and this meeting decides not to confirm or modify the recommendations of the review panel but to revoke the original decision and replace it with a new one (which may be different from the recommendations of the review panel), such that the decisions of the Extraordinary Meeting shall become binding on all members of the Commission.¹⁸⁴ If the recommendations are confirmed or modified by the Extraordinary Meeting such recommendations shall be binding.¹⁸⁵ Another situation which shows that the decisions of the Extraordinary Meeting are superior to the recommendations of the review panel is a case where the review panel finds that the decision of the SPRFMO Commission is inconsistent with the provisions of the SPRFMO Convention, UNCLOS or the Fish Stocks Agreement but is upheld by the Extraordinary Meeting. If, after reconsidering the decision in the light of those findings and the recommendations of the review panel, the Extraordinary Meeting still confirms its original decision, the objecting State/s shall implement the decision or institute dispute settlement proceedings under the SPRFMO Convention.¹⁸⁶ In this sense, the recommendations of the review panel are much closer to the binding force of conciliation's proposals in that they have only a recommendatory nature.

The third category belongs to the NAFO Convention and the NEAFC Convention. The binding nature of the recommendations proposed by the *ad hoc* panel established under the NAFO Convention is somewhat different from those two, since there are no provisions which can be taken as implying that the recommendations of an *ad hoc* panel are binding. Article XIV (10) states that an *ad hoc* panel can make recommendations to the Commission in relation to the measures that have been objected to by deciding whether or not such measures should be modified or rescinded or maintained. In a case where the *ad hoc* panel finds that the measures should be modified or rescinded, the Commission 'shall meet to consider the recommendations of the *ad hoc* panel'.¹⁸⁷ Reading this provision literally and comparing it to the other two conventions mentioned above, the Commission does not need to abide by the *ad hoc* panel's decision. It may decide to amend the objected measures, according to the recommendations, or it may take an *ad hoc* panel's

¹⁸⁴ Annex II (10) (e) to the SPRFMO.

¹⁸⁵ Ibid.

¹⁸⁶ Annex II (10) (f)-(h) to the SPRFMO.

¹⁸⁷ Art. XIV (11) of the NAFO Convention.

recommendations into account without modifying its measures. The argument that the NAFO's *ad hoc* panel's recommendations are not binding can be supported by the other provision contained within the dispute settlement clause of the NAFO Convention, which provides that where a dispute arises the Contracting Parties to the dispute may submit the dispute to 'a non-binding *ad hoc* panel'.¹⁸⁸ For the NEAFC Convention, it does not expressly provide that the recommendations are binding or not binding. Given the fact that a recommendation does not have the same authority as judgments of ICJ or ITLOS, it can be said that a recommendation is not binding but the Commission need to take it into account when adopting further recommendations under the Convention.

4.2 The Use of RFMO Panels—An Overview

To date, the first—and only—case that has been brought before an RFMO panel is the case concerning *The Objection by the Russian Federation to a Decision of the Commission of the South Pacific Regional Fisheries Management Organisation*.¹⁸⁹

In this case, Russia claimed that the Conservation and Management Measure for *Trachurus Murphyi* (CMM 1.01) or jack mackerel that was adopted by Commission at the first meeting of the SPRFMO in February 2013 was inconsistent with the provisions of the Convention and with other relevant international law as reflected in the UNCLOS or the Fish Stocks Agreement,¹⁹⁰ since Russia did not receive a share of the total allowable catch (TAC) of 360,000 tonnes for the year 2013, which in Russia's view was an 'unjustifiable discriminatory' action against it.¹⁹¹ The reason not to allocate Russia a share of the catch was the lack of clarity of

¹⁸⁸ Ibid, Art. XIV (10).

¹⁸⁹ See *In Proceedings Conducted by the Review Panel Established under Article 17 and Annex II of the Convention on the Conservation and Management of High Seas Fishery Resources in the South Pacific Ocean with Regard to the Objection by the Russian Federation to a Decision of the Commission of the South Pacific Regional Fisheries Management Organisation* (Finding and Recommendations) 5 July 2013 (hereinafter the *Trachurus Murphyi* case). available at <<https://www.sprfmo.int/assets/History/Russian-Objection-2013/Findings-and-Recommendations-of-the-Review-Panel-dated-5-July-2013.pdf>> accessed 29 November 2014. See further in chapter 5, section 2.1.6.

¹⁹⁰ Russia argued that the Decision constitutes a violation of Art. 87, 116, and 119 of UNCLOS and Art. 8 of the Fish Stocks Agreement which 'conveys a principled commitment in international law prohibiting discrimination in conservation'. See *Trachurus Murphyi* case, para. 70.

¹⁹¹ Objection by the Russian Federation, available at <<http://www.sprfmo.int/assets/Commission-Meeting-1st/Objection/Letter-1-Objection.pdf>> accessed 1 December 2014. See also Annex K, available at <<http://www.sprfmo.int/assets/Commission-Meeting-1st/Report/Annex-K-Russian-Federation-Statement.pdf>> accessed 1 December 2014.

the Russian-flagged vessel called the *Lafayette* (which was a fish processing vessel or a mother ship, as was claimed by the other parties, rather than a fishing trawler)¹⁹² as to whether it was an active fishing vessel in the waters of the Pacific Ocean, thus enabling Russia to claim its share of the catch.

Russia objected to this decision within the objection period up to 19 April 2013 and proposed its own alternative measures which established catch limits of jack mackerel in respect of the Russian fisheries as equal to 19,944 tonnes. Consequently, the decision was not binding upon Russia. In this case, apart from Russia and the SPRFMO who submitted written submissions, four other Members of the Commission, namely Chile, Chinese Taipei, the EU and New Zealand, also submitted written submissions to the review panel in order to support the positions argued by the SPRFMO. Only Russia, Chile and the SPRFMO requested an opportunity to be heard at the hearing.

On 5 July 2013, the review panel provided its findings and recommendations. The review panel found that the Conservation and Management Measure for *Trachurus Murphyi* unjustifiably discriminated in form or in fact against Russia because there was no convincing argument either in the written or the oral submissions to justify why the CMM 1.01 was adopted in a way that excluded Russia from participating in fishing activities in 2013. However, CMM 1.01, as the review panel said, was not inconsistent with the provisions of the SPRFMO Convention or with other relevant international law, as reflected in UNCLOS or the Fish Stocks Agreement.

With regard to the alternative measure proposed by Russia, the review panel found that it was not equivalent in effect to CMM 1.01. Thus the review panel proposed a new alternative measure that was equivalent in effect to CMM 1.01, as required by paragraph 10 (c) of the Annex II, by requiring that Russia should authorise its vessels to catch jack mackerel in 2013 subject to two conditions. Firstly, Russia could catch jack mackerel only if it concluded from the data reported to the SPRFMO that it was unlikely that the total catch in 2013 would reach the TAC of

¹⁹² There were several situations leading the other parties to believe that the *Lafayette* was not a fishing trawler, such as the inspection of the French authorities on the *Lafayette* which found that there was no fishing gear or equipment on board. In addition, Peru provided data showing that four of its vessels had transhipped 31,275 tonnes to the *Lafayette* in 2010; see these facts in *Trachurus Murphyi* case, paras. 28 and 38.

360,000 tonnes. Secondly, Russia could catch jack mackerel only until the SPRFMO reported that the TAC of 360,000 tonnes had been reached.¹⁹³

CONCLUSIONS

No one knows how many international environmental disputes there have been or currently are, as no kind of register of such disputes is kept. This is equally the case with other kinds of dispute in international law. It is likely that there have been a considerable number of international environmental disputes. As with other international disputes, it is likely that the majority of these disputes have been resolved by negotiation between the States concerned.

Of the various third-party means that are available to resolve international environmental disputes, little use has been made of diplomatic means. As far as conciliation and inquiry go, this is in line with the limited use of these means in other areas of international law. Nevertheless, given that quite a number of environmental treaties provide for conciliation and inquiry, it is perhaps surprising that they have hardly been used. One explanation may be that these means are not well-suited to, or effective in, settling international environmental disputes because of the characteristics of the latter outlined in chapter 2. Whether this is so is explored in chapters 4 and 5 below.

By contrast with third-party diplomatic means, judicial means have been much widely used to settle international environmental disputes. Since 1945 there have been on average 1-2 inter-State arbitrations.¹⁹⁴ Nine arbitrations have concerned environmental disputes, all but one having being initiated since 1997. Thus, in the past 20 years or so environmental disputes account for a significant proportion of all inter-State arbitrations. In part, this must be due to the possibility of compulsory arbitration under UNCLOS, since this accounts for half the environmental arbitrations. However, two of the four UNCLOS arbitrations led to a decision on the merits, whereas all the other environmental arbitrations did not. The ICJ has heard eight environmental cases, five of which were referred to the Court in the past 10 years, so in the past decade environmental cases have become a significant proportion of the Court's case load. Four of the eight cases did not result in a judgment on the

¹⁹³ Ibid, para. 100.

¹⁹⁴ Christine Gray and Benedict Kingsbury, 'Developments in Dispute Settlement: Inter-State Arbitration Since 1945' (1992) 63 British Ybk Intl L 97, 97-134.

merits. The ITLOS has had only one environmental dispute referred to and that was settled before the Tribunal could give a judgment on the merits. One reason why the ITLOS has not had more cases is because so few of the parties have chosen it as their preferred forum for settling UNCLOS disputes.

For NCPs the cases referred by States is low compared with the numbers referred by the secretariats of MEAs. On the evidence of this chapter, only six environmental disputes have been settled using NCPs. As mentioned earlier, NCPs have not been primarily designed as dispute settlement mechanisms.

To date only one environmental dispute has been referred using the specialist mechanisms of RFMOs for settling disputes arising out of the use of the objection procedure. That is not surprising, since only four RFMOs currently have such mechanisms, which are concerned with a very specialised form of dispute. Furthermore, the fact that such review mechanisms exist may have discouraged States from making objections in the RFMOs concerned. This is illustrative of a wider point, that the existence of third-party dispute mechanisms may encourage States to settle their disputes through negotiation because they do not wish to involve a third party in their dispute, especially a judicial third party which can resolve the dispute in a way that binds the parties to the dispute.

CHAPTER 4

A COMPREHENSIVE APPRAISAL OF THE SUITABILITY OF DISPUTE SETTLEMENT MECHANISMS IN SETTLING INTERNATIONAL ENVIRONMENTAL DISPUTES

INTRODUCTION

It needs to be recalled that, as was explained in chapter 1, international environmental disputes may have special characteristics though by no means all environmental disputes have all or any of these characteristics. Such characteristics include: 1) the bilateral or multilateral character of international environmental disputes; 2) the multi-dimensional character of international environmental disputes; 3) the complexity involved in identifying the sources of the breach of international environmental obligations; 4) the complexity involved in quantifying damages and 5) the interpretation and application of procedural obligations.

The research question that will be addressed in this chapter is: How suitable are the various dispute settlement mechanisms, as described in chapter 3, for settling international environmental disputes that have such characteristics? Thus, the aim of this chapter is to consider the suitability of each of the various mechanisms for each of these different characteristics in order to appraise their capabilities in dealing with such disputes. To this end, each of these characteristics of international environmental disputes will be tested by comparing it with the inherent nature of each mechanism—including structural arrangements—in order to ascertain their suitability. The present chapter will begin by evaluating third-party diplomatic means in section 1 before moving on to analyse judicial means in section 2, NCPs in section 3 and RFMO panels in section 4.

1. AN APPRAISAL OF THE SUITABILITY OF THIRD-PARTY DIPLOMATIC MEANS IN SETTLING INTERNATIONAL ENVIRONMENTAL DISPUTES

Before appraising the suitability of diplomatic means, it is worth making the general point from the outset that they are not suitable in cases where the parties want a dispute to be decided according to rules of law with a binding outcome.

1.1 An Appraisal of Mediation

1.1.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

There are no fixed patterns or rules regulating how mediation will be conducted. Mediation proceedings are flexible and they can be tailored to fit any particular dispute. The ways in which mediators try to bring the *two* disputing States together in order to resume negotiations—as well as making proposals for them—are essentially bilateral. Thus, mediation is well suited for settling bilateral environmental disputes. For multilateral environmental disputes, mediation can employ some techniques in order to manage and facilitate numerous negotiations among multiple disputants. For instance, the mediator may encourage coalitions of disputing States that share the same attitude and then each coalition may select a representative to act as their negotiator with the representatives of other coalitions. For example, there may be a large number of potential participants with a stake in the whaling issue which may include whaling and non-whaling States.¹ Applying this technique may enable the mediator to deal with small segments of the disputing parties while taking into account the interests of all the parties. It is plausible to assert that the multiple actors involved in international environmental disputes can easily be integrated into the mediation process. Lars Kirchhoff is also of the view that ‘...the mediation process can more easily be adapted to the size and composition necessary than is possible during court proceedings...and in cases where numerous relevant parties do exist, mediation offers the opportunity to tailor an adequate process’.² However, this is bound to be problematic in so far as some parties may not give their consent to the intervention of the mediator so that the mediator cannot bring all the parties into the mediating processes. An additional technique that is available for mediators in dealing with a large number of disputants is that when there are several parties who have the same view of an issue, the mediator may start to identify the possible primary parties—either direct or indirect parties—and encourage them to resume

¹ John S. Dryzek and Susan Hunter, ‘Environmental Mediation for International Problems’ (1987) 31 ISQ 87, 98.

² Lars Kirchhoff, *Constructive Interventions: Paradigms, Process and Practice of International Mediation* (Kluwer Law International 2008) 202.

negotiations.³ It is unlikely, as is suggested by the UN Guidance, that all the stakeholders can participate directly in the formal negotiations. What the mediator can do is to create an inclusive process by facilitating ‘the interaction between the conflict parties and other stakeholders and create mechanisms to include all perspectives in the process’.⁴

Due to the fact that mediation is a voluntary process, in the cases of *erga omnes* and *erga omnes partes* environmental claims, the State that is alleged to be in breach needs to express its consent to mediate, otherwise mediation will not be conducted. For an allegation of a breach of an MEA with *erga omnes partes* obligations, it would not be possible for any State party to initiate mediation unilaterally, since there are no MEAs that provide for compulsory mediation. In addition, it is possible that a third party could offer to mediate between one or a group of States and the State that is allegedly in breach of its obligations,⁵ for example, in the *Whaling* case, an offer to mediate between, say, the 25 or so States that sent a joint protest to Japan over JARPA II and Japan.⁶ It is also possible, but less likely, that the 25 States could have suggested to Japan that they should resolve the dispute through mediation. Of course, there is no guarantee in either scenario that Japan would agree to mediation.

1.1.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: Given that mediation can only occur with the consent of the parties to the dispute, it is *always* open to the parties to choose a mediator with the necessary expertise. The parties can choose a mediator with expertise in the environmental matter at issue. If third parties offer their help to resolve a dispute, only the parties involved can make a decision whether to accept their help by considering their qualifications (apart from the other considerations, such as their independence, political powers, reliability and so on). Suitably qualified mediators can provide their technical and scientific expertise when they are assessing

³ Chester A. Crocker, Fen Osler Hampson and Pamela R. Aall, *Taming Intractable Conflicts: Mediation in the Hardest Cases* (United States Institute of Peace Press 2004) 97.

⁴ The United Nations, *The United Nations Guidance for Effective Mediation* (UN 2012) 11, reprinted at <<http://www.un.org/wcm/webdav/site/undpa/shared/undpa/pdf/UN%20Guidance%20for%20Effective%20Mediation.pdf>> accessed 27 August 2014.

⁵ Kirchhoff (n 2) 204.

⁶ See chapter 2, section 3.1.3.

the facts of the dispute.⁷ This is because mediators do not necessarily have to be lawyers. Rather, mediators can be reinforced by a multidisciplinary team consisting of experts from several fields that are relevant to the international environmental dispute in question with a view to reaching acceptable solutions based on sound scientific and technical information. A particularly clear illustration of this may be seen in the mediation efforts of the World Bank when it mediated the dispute between India and Pakistan over the use of the Indus waters. Rather than being composed merely of international lawyers, the World Bank appointed engineering advisers—including both an American consulting engineering firm and other engineers—in addition to the Bank's legal team.⁸ Thus, the mediator can be any person or group of persons who has the necessary knowledge in handling technical and scientific issues.

Mediation is likely to help the parties agree on those experts who can be trusted by them or the mediators may suggest that the parties should establish a joint inquiry process or a working group to study and determine the relevant scientific and technical points in the dispute that is acceptable to the parties.⁹ With sufficient understanding of the scientific and other information the parties may eventually reach an agreement.

Equally important is the mediated agreement proposed by the mediators. In a situation where the mediators are equipped with sufficient knowledge of environmental science, they can suggest to the parties, in terms of technical details, a way in which they can deal with scientific uncertainty as a consequence of the constantly changing nature of environmental knowledge. The mediators may also suggest strategies for the parties with a view to addressing any environmental problems that may arise in the future, such as the establishment of scientific and monitoring bodies to keep them updated on technological progress.¹⁰

Questions relating to societal choice: Other aspects which may be more relevant than legal issues—such as social aspects, or economic aspects—can be taken into consideration by mediators, who will probably have more relevant expertise than international judges or arbitrators. As was mentioned in chapter 2, the ideologies of

⁷ Jeffrey Z. Rubin, 'Third-Party Roles: Mediation in International Environmental Disputes' in Gunnar Sjöstedt (ed), *International Environmental Negotiation* (Sage Publications 1993) 287.

⁸ Niranjana Das Gulhati, *Indus Waters Treaty: An Exercise in International Mediation* (Allied Publishers 1973) 172.

⁹ Laura Horn, 'The Role of Mediation in International Environmental Law' (1993) 4 ADRJ 16, 28.

¹⁰ Jorge E. Vinuales, 'Legal Techniques for Dealing with Scientific Uncertainty in Environmental Law' (2010) 43 VandJTransnat'l L 437, 446.

States in relation to protecting the environment may fundamentally differ from State to State. Mediation may provide, at least in theory, a better process for dealing with these ideologically driven disputes than resorting to international litigation. The art of ascertaining the underlying causes of the dispute will certainly not be focused merely on the legal rights and obligations, but the job of mediators should be to clarify the parties' essential interests and to reach politically acceptable compromises enabling the parties to conclude a settlement or resume negotiations with a view to encouraging the parties to rethink their environmental policies. For instance, in an international watercourse dispute the mediators may exert leverage on one riparian State to move from the extreme end of the bargaining continuum in pursuing its development policy to construct a dam for the sole benefit of its own country to make some necessary concessions by taking other States' policies for protecting the environment into account. However, this does not mean that international law is less important than other social factors. It has been suggested that 'the mediator's proposals must be in full compliance with the applicable rules of international law so as to ensure the long-term success of such proposals under the rule of law'.¹¹ Thus, the outcome of the mediation will have to balance all those elements, including both legal and non-legal factors.

1.1.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

The identification of the facts giving rise to a dispute: The nature of mediation requires the active participation of the mediators in the dispute settlement process. However, the way in which all information relating to the dispute that would allow the mediators thoroughly to understand the sources of the breach of obligations come mainly from the parties themselves rather than from their own investigations. So, the question may arise as to whether the mediators can use their diplomatic abilities to ascertain the sources of the breach. It is possible that in cases where specialised international organisations serve as mediators, they will have more particular abilities to examine and clarify the facts of the dispute submitted by the parties than do States

¹¹ Francisco Orrego Vicuña, 'Mediation' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2010), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e61?rskey=VHJ6bY&result=1&prd=EPIL>> accessed 27 June 2016. The UN also supports this proposition by suggesting that 'consistency with international law and norms contributes to reinforcing the legitimacy of a process and the durability of a peace agreement. It also helps to marshal international support for implementation.', see The United Nations (n 4) 16.

and individuals. For instance, in the international watercourses context, where one needs to collect huge amounts of data before concluding whether particular States are in compliance with their obligations, international bodies may have the necessary knowledge and expertise to perform this function. In addition, in situations of climate change where several States, both developed and developing States, are claimed to have emitted carbon dioxide, international organisations may be able to serve better as mediators than individual States, who may have conflicts of interest, and thus the question of the impartiality of the mediators may arise.

In cases where the State which is responsible for causing international environmental harm cannot be easily identified, the informal procedure of mediation may be used to approach the *potentially* responsible States. Since the criteria of clear and convincing evidence, as applied by international courts, may not necessarily be the essential element in proving the identity of the wrongdoer, mediators can create opportunities for more informal consultations with the potentially responsible States in order to raise awareness of the problems. This may be described as a pre-negotiation stage in which the mediator helps to identify the parties to the negotiations.¹² It should be noted, however, that although the mediator may try to approach the potential wrongdoer State, it is possible that such a State may not give its consent to mediation, so preventing further negotiations and thus the eventual settlement of the dispute.

The determination of a breach of an international obligation: Once the facts have been determined by mediators, the next question is: Is mediation suitable for determining whether those facts represent a breach of an international obligation by another State and whether that State is responsible under the rules of State responsibility. If mediators are lawyers they can perform this task, but in practice diplomatic means are unsuitable for addressing legal issues, since the main function of mediation is to re-establish communication and move the parties towards agreement rather than to identify what are the legal consequences arising from an internationally wrongful act.

¹² Rubin (n 7) 283.

1.1.4 Suitability for Quantifying Damages

Two questions may be asked when considering the suitability of mediation in quantifying environmental damages. Firstly, is it the role of the mediator to suggest the payment of damages where appropriate? Secondly, is the mediator equipped with the necessary expertise for quantifying damages in this respect? To the first question, it is possible that the issue of damages may be raised before the mediators and it is also possible that the mediators may suggest that one party should compensate the other party for environmental damage. However, it should be noted that the objective of mediation does not fall within the responsibility-based paradigm and that mediation is not, as Francisco Orrego Vicuña says, ‘typified as a form of imposition, but as a form of suggestion, advice, exhortation and proposals’.¹³ If one considers that compensation for environmental damage is a form of imposition, then it is safe to say that mediation may not be the right option for the parties to choose to eliminate disputes between them, since ‘at the end of mediation, in fact, it is never possible to speak of victors or defeated’.¹⁴ Thus, mediation is unsuitable for quantifying damages.

Nevertheless, in theory, since mediation is a diplomatic process that is flexible enough for one party to make a concession or to accept that it should pay compensation for environmental damage, then the second question may be answered in the affirmative. This is because, as a matter of principle, mediation processes are flexible to allow the mediators to employ various techniques to calculate damages. There is also a useful methodology that mediators may use, such as those methodologies that have been used to calculate non-commercial environmental values by the United Nations Compensation Commission (UNCC).¹⁵ Furthermore, it is possible that the mediators would suggest that the parties should establish a compensation commission to perform the calculating function in awarding environmental damages.

¹³ Vicuña (n 11).

¹⁴ Ibid.

¹⁵ See the Conclusions by the Working Group of Experts on Liability and Compensation for Environmental Damage Arising from Military Activities in *Liability and Compensation for Environmental Damage: Compilation of Documents* (Alexandre Timoshenko ed, UNEP 1998) paras. 39-42. See also UNCC, *Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Installment of “F4” Claims*, S/AC.26/2005/10, 30 June 2005, paras 57-58.

1.1.5 Suitability for Interpreting and Applying Procedural Obligations

The interpretation and application of procedural obligations are matters of law. The question that arises is whether or not mediation can undertake this function. It was noted previously that mediation involves the process of bringing the parties together on the basis of the proposals which the mediator will be bringing forward. These proposals may be based either on legal or non-legal procedures or both. Thus, during the course of mediation or at the final stage of the mediation process, the mediators may suggest that the parties should accept certain procedural obligations if the mediators see fit and if this is appropriate to the process of dispute resolution and for the sake of environmental protection. The mediators can propose, for example, that the parties should comply with the obligations to notify, inform and consult or even to conduct an EIA. Proposing that the parties should accept certain procedural obligations can be viewed as an attempt by the mediators to preserve the underlying relationship and to move towards cooperation between the disputing parties, which are clearly the objectives of mediation. The mediators may make a proposal that will enhance the cooperation that allows the parties to co-exist. Considering the inherent nature of procedural obligations, a scholar describes such obligations as a ‘soft control process’.¹⁶ This rationale fits neatly into the concept of dispute settlement by means of mediation, since it focuses on the preservation and improvement of the ongoing future relationship between the disputing States. The situation is particularly important in disputes over the use of international watercourses, in that a riparian State inevitably has to share the same river with other riparian States without them being able to escape from each other.¹⁷

In cases where the disputing parties reach a deadlock in trying to resolve their dispute and where their positions are hard to reconcile, one of the functions of a mediator is to assist the parties to resume negotiations. By proposing soft-control measures—such as suggesting that States should initiate consultations with those States which are most likely to be affected in respect of the potential risks of transboundary pollution—mediators can alleviate the tensions and open the channels of communication between the parties again so as to enable them to co-manage the

¹⁶ Mari Koyano, ‘The Significance of Procedural Obligations in International Environmental Law: Sovereignty and International Co-operation’ (2011) 54 *Japanese Ybk Intl L* 97, 147.

¹⁷ In the context of the Watercourses Convention see generally in Alistair Rieu-Clarke, ‘Notification and Consultation on Planned Measures Concerning International Watercourses: Learning Lessons from the Pulp Mills and Kishenganga Cases’ (2014) 24 *YIEL* 102, 102-113.

risks of environmentally hazardous activities. In cases where a number of States are involved, mediators—notably international organisations, can use communicative strategies by facilitating communication between the parties.¹⁸ For instance, a State that is proposing to commence an activity can communicate the results of an EIA to an international organisation which is deemed to be acceptable as a mediator so that the results will be further disseminated to the potentially affected States.¹⁹ After that, the mediator may ask all the parties to negotiate with each other.

Thus, in such situations, mediators can help to create an atmosphere that is conducive to further negotiation and may reach a settlement. In addition, a mediator's proposal in respect of procedural obligations may be understood as a soft control process leading to a settlement of the dispute by means of a soft political process. For the reasons explained above, mediation is an appropriate means of settling international environmental disputes that need the parties to apply procedural obligations.

1.2 An Appraisal of Conciliation

1.2.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

Bilateral international environmental disputes can be settled by conciliation, since, as has been noted by Jean-Pierre Cot, 'conciliation is in essence a strictly bilateral procedure'.²⁰ The question may be asked how far conciliation is suitable for settling multilateral environmental disputes. Two model rules involving conciliation that have been drafted by the PCA may be worth mentioning here, i.e. the PCA Conciliation Rules²¹ and the PCA's Environmental Rules for Conciliation.²² In the introductory part of the PCA Conciliation Rules, multilateral disputes are mentioned which reflect the intentions of the draftsmen to the effect that conciliation can facilitate the

¹⁸ Saadia Touval and I. William Zartman, 'Mediation in International Conflicts' in Kenneth Kressel (ed), *Mediation Research: The Process and Effectiveness of Third-Party Intervention* (Jossey-Bass 1989) 127.

¹⁹ Phoebe N. Okowa, 'Procedural Obligations in International Environmental Agreements' (1996) 67 *British Ybk Intl L* 275, 283.

²⁰ Jean-Pierre Cot, *International Conciliation* (Rollo H. Myers tr, Europa 1972), 59.

²¹ Hereinafter the PCA Conciliation Rules, reprinted at <<https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Permanent-Court-of-Arbitration-Optional-Conciliation-Rules.pdf>> accessed 12 May 2016.

²² See chapter 3, section 1.2.2.

resolution of multi-party disputes as it states that ‘These Rules are also appropriate for use in connection with multiparty disputes, provided that changes are made to reflect participation by more than two parties.’²³ The parties to a particular dispute can adjust these model Rules for use in multi-party disputes and they may consult with the Secretary-General of the PCA in relation to the modification of such Rules. As far as the PCA’s Environmental Rules for Conciliation are concerned, they have specific provisions in relation to the utilisation of natural resources and environmental protection that are based primarily on the PCA Conciliation Rules. They also recognise the possibility that more than two States may be involved in a dispute.²⁴ This might be done by incorporating these Rules within a convention that would be used for settling future disputes or by incorporating it within a special agreement that would be concluded after the dispute has arisen.

In international practice, an example of multi-party conciliation can be seen in the case concerning the allocation of the assets of the former East African Community (EAC) which involved three States, namely Kenya, Uganda and Tanzania. These three States asked for conciliation from Dr. Victor Umbricht, a Swiss diplomat, to make a proposal in relation to the appropriate criteria for the distribution of the EAC’s assets.²⁵ Conciliation under Annex V to UNCLOS is also worth referring to, since it recognizes the possibility of a multiplicity of parties being involved in a dispute concerning the interpretation and application of UNCLOS, including the provisions relating to the protection of the marine environment.²⁶ As is reflected in Article 3 of Annex V, *two or more parties* that have the same interest shall appoint two conciliators jointly or they shall appoint them separately if they have separate interests.²⁷ In addition, where there are two parties to a dispute, each appoints two conciliators. The use, in paragraph (h), of the phrase ‘*in disputes involving more than two parties having separate interests*’ clearly indicates that there may be a multiplicity of parties.²⁸ The same phrase also appears in Annex II Part 2 of the CBD which has the same scheme for the appointment of conciliators as Annex V of

²³ The PCA Conciliation Rules, 151-152. See also, 214.

²⁴ See Section (ii) of the introductory part of the PCA’s Environmental Rules for Conciliation, 213.

²⁵ See for more details of the case Victor Umbricht, ‘Principles of International Mediation: The Case of the East African Community’ (1984) 187 *Recueil des Cours* 307. It should be noted that although Umbricht considered himself to be acting as a mediator, in reality his efforts fell within the definition of conciliation.

²⁶ Art. 284 of UNCLOS.

²⁷ See Art. 3 (g) of Annex V to UNCLOS.

²⁸ See Art. 3 (h) of Annex V to UNCLOS.

UNCLOS, since the draftsmen may have realised that several States may have an interest in the protection of the biological diversity of a particular State.²⁹ However, detailed procedures for dealing with multilateral disputes are not provided in Annex V to UNCLOS, although Article 4 allows the conciliation commission to determine its own procedure, which may include inviting any State party to contribute its views.³⁰ This means that in disputes involving more than two parties the conciliation commission may decide to adapt the procedures to those that are suitable for multi-party disputes. In practice, it would seem perfectly suitable, provided that the number of disputants was not excessively large, e.g. it could not be easily used if a dispute had 20 or more parties. It should be pointed out that none of the procedures discussed in this subsection have yet been used.

For a dispute involving an alleged breach of an *erga omnes* (*partes*) obligation, it is possible that conciliation could be initiated by a third party that offers its help to settle a dispute or that a State can suggest the State allegedly in breach of such obligations that it seeks to settle a dispute through conciliation. As with mediation, there is no guarantee that the State concerned will accede to conciliation. For *erga omnes partes* environmental claims, it appears that some multilateral treaties have provided for compulsory conciliation so as to allow *any party* to the dispute to initiate conciliation unilaterally. The CBD and the Vienna Convention for the Protection of the Ozone Layer have provisions that allow for the unilateral initiation of conciliation in a case where the parties to the dispute have not accepted the same or any procedure: i.e. arbitration or the ICJ.³¹ Any of the parties to a dispute arising under the UNFCCC and the UNCCD can also submit the dispute to conciliation if negotiations, good offices or mediation are unsuccessful.³²

1.2.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: Conciliation is suitable for dealing with highly technical issues of international environmental disputes, since its structural arrangements are flexible enough for the parties to appoint environmental experts as conciliators, or external experts could be easily appointed to assist the conciliators. The ways in which conciliators obtain technical information may come

²⁹ See Art. 2 of Annex II, Part 2 of the CBD.

³⁰ See Art. 4 of Annex V to UNCLOS.

³¹ See Art. 27 (4) of the CBD and Art. 11 (4) of the Vienna Convention for the Protection of the Ozone Layer.

³² See Art. 14 (5)-(7) of the UNFCCC and Art. 28 (6) of the UNCCD.

from various sources. If a conciliation commission is made up of international lawyers, diplomats or politicians, it may need assistance from technical experts. Some examples may illustrate how conciliation commissions have resorted to external experts to acquire technical knowledge relevant to the dispute. In order to understand the geology and geophysics of the continental shelf area between Jan Mayen and Iceland, for the purpose of recommending the continental shelf boundary, the Conciliation Commission in the *Jan Mayen* case³³ made use of the expertise of geological experts. Also, in the case concerning the allocation of the assets of the former EAC, Dr. Victor Umbricht extensively availed himself of advice from technical experts who included accountants, financial experts and engineers. After the technical experts had submitted their draft reports to Dr. Umbricht, he passed them on to the governments for their comments. The reports were used as the basis of the proposals and for the parties' negotiations.³⁴

Questions relating to societal choice: Given that conciliation is a method that undertakes an objective investigation and evaluation of *all aspects* of a dispute,³⁵ the complexities of questions involving social, economic and political factors associated with international environmental disputes may easily be taken into account when settling a dispute if the parties opt for conciliation. Therefore, the solution recommended by a conciliation commission may not be based solely on its interpretation of the relevant law.³⁶ This may be called 'political conciliation', as opposed to 'legal conciliation'.³⁷ Susani states that 'the application of the law is not the primary purpose of conciliation. Parties elect this procedure because of their desire to have other considerations taken into account'.³⁸ A conciliation commission

³³ The Conciliation Commission was made up of three lawyers and diplomats: Elliot L. Richardson (Chairman), Jens Evensen (Conciliator for Norway), Hans Andersen (Conciliator for Iceland).

³⁴ J. G. Merrills, *International Dispute Settlement* (5 edn, CUP 2011) 67.

³⁵ UN, *Handbook on the Peaceful Settlement of Disputes between States* (UN Publication 1992) 45.

³⁶ See, for example, what the Virginia Commentary notes about the function of the conciliation under Annex V to UNCLOS which states that 'The proposal made to the parties should contain *everything* which the conciliation commission considers appropriate to enable the parties to reach an amicable settlement of the dispute...' (emphasis added) Myron H. Nordquist, Shabtai Rosenne and Louis B. Sohn (eds), *United Nations Convention on the Law of the Sea 1982: A Commentary*, vol V (Martinus Nijhoff Publishers 1989) 321. See also Lucius Caflisch, 'The OSCE Court of Conciliation and Arbitration: Some Facts and Issues' in Michael Bothe, Natalino Ronzitti and Allan Rosas (eds), *The OSCE in the Maintenance of Peace and Security: Conflict Prevention, Crisis Management and Peaceful Settlement of Disputes* (Kluwer Law International 1997) 391.

³⁷ Sven M.G. Koopmans, *Diplomatic Dispute Settlement: The Use of Inter-State Conciliation* (T.M.C. Asser Press 2008) 128-129. However, these two kinds of conciliations can be mixed together, since the conciliators need to consider both legal and non-legal factors.

³⁸ Nadine Susani, 'Conciliation and Other Forms of Non-Binding Third Party Dispute Settlement' in James Crawford and others (eds), *The Law of International Responsibility* (OUP 2010) 1103.

may be directed to apply societal factors by the parties' agreements. Thus, the Conciliation Commission in the *Jan Mayen* case took other factors, apart from legal questions, into account when making their recommendations by virtue of Article 9 of the Agreement concluded between Iceland and Norway, which provided that 'the Commission shall take into account Iceland's strong economic interests in these sea areas, the existing geographical and geological factors and other special circumstances.'³⁹ This case was a 'politically delicate and emotive' dispute⁴⁰ and customary international law relating to continental shelf delimitation 'was far from completely crystallized',⁴¹ so that conciliation seemed to be the right option to solve this problem, since it could provide fair solutions which could be accepted by the parties, taking into consideration other societal factors that would not necessarily be relevant in a claim as of right.⁴² In the *Jan Mayen* case, the will of the parties to allow the Commission to take other factors into account when making the recommendation was clearly provided for in the agreement. However, in the absence of the parties' mandating the conciliation commission to apply specific factors, conciliation, by its nature, has to be as an essential feature and it requires the use of methods that are sufficiently flexible, even though they are relatively formal, so that a conciliation commission is able to consider other societal factors. As is shown in the *East African Community* case, an effort was made to settle the dispute by taking into account equity and fairness in relation to matters such as economic need, not by applying strict legal rules.⁴³ The application of equity is supported by Van Asbeck when he claims that:

'le concept de « conciliation » dans le sens d'une simple transaction, d'un « *do ut des* », d'un « split the difference », basés sur des considérations d'équité, que dirais-je, d'équité pratique, équité de *common sense* ou peut-être plutôt d'efficacité, d'opportunité

³⁹ Art. 9 of the Agreement between Norway and Iceland on Fishery and Continental Shelf Questions, Vol 2124, I-37025.

⁴⁰ Robin Churchill, 'Maritime Delimitation in the Jan Mayen Area' (1985) 9 MP 16, 25.

⁴¹ Elliot L. Richardson, 'Jan Mayen in Perspective' (1988) 82 AJIL 443, 445.

⁴² Ibid, 449.

⁴³ See Victor Umbricht, *Multilateral Mediation: Practical Experiences and Lessons* (Martinus Nijhoff Publishers 1989) 246 and 267.

politique, dans le seul but d'écarter un obstacle, abstraction faite de toute justification en droit de la décision.'⁴⁴

It should be borne in mind that the ultimate goal of conciliation is to settle a dispute by recommending the terms of a settlement that will be acceptable to the parties, so that if applying international law would be more likely to exacerbate the relationships between the disputants, rather than reducing the tensions, such recommendations would run counter to the main objective of conciliation, which means that the conciliators should avoid going in that direction. With regard to the applicable rules which are extraneous to law and which a conciliation commission may apply, Cot has rightly pointed out that:

'This calls for a package deal incorporating elements of equity, *contra legem* if necessary. Reference to international law may well hinder the solution of the conflict. If one of the parties to the dispute has a clearly unfounded legal case, stating the law may well amount to pouring oil on the flames.'⁴⁵

This proposition confirms the suitability of conciliation in dealing with a dispute in which the essential points in the conflict are closely intertwined with complex societal factors, as is exhibited in international environmental disputes.

1.2.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

The identification of the facts giving rise to a dispute: In appraising its suitability in this regard, two aspects are relevant and both need to be considered. Firstly, the issue is concerned with the suitability of conciliation in performing the task of an inquiry with a view to identifying the source of a breach. Identification of the source of a breach of an international environmental law is a question of fact which conciliators should elucidate by using certain techniques before proposing any recommendations. In-depth investigation of the facts of a dispute is an essential function of conciliation, in contrast to mediation in which the inquiry function plays only a minimal role.

⁴⁴ F. M. van Asbeck, 'La Tâche et l'Action d'une Commission de Conciliation' (1956) 3 NTIR 1, 7.

⁴⁵ Jean-Pierre Cot, 'Conciliation' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006) online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e20?rskey=LuCXjO&result=1&prd=EPIL>> accessed 27 June 2016.

Therefore, conciliation is a dispute settlement mechanism that is suitable for finding out which States have caused pollution of the environment.

Secondly, despite the fact that conciliation has to undertake an inquiry function, the question that needs to be asked is: Does a conciliation commission have sufficient competence to ascertain the sources of a breach of international environmental obligations in cases where it is difficult to identify which States are causing environmental harm? To answer this question, the preliminary point that needs to be examined entails establishing the burden of proof that a conciliation commission will probably have to apply. Usually the burden of proof, as Cot has noted, falls mainly on the parties, in that 'they are obliged to prove their allegations' and 'they are bound to aid the Commission in its investigation of the facts'.⁴⁶ In this situation, there is a risk that the facts will not be uncovered if a party is unable to prove its allegations because, for example, it lacks sufficient scientific evidence to convince the conciliators who has been causing environmental harm. However, a certain flexibility is expected here when a conciliation commission can perform an independent inquiry of its own and 'when the information provided by the parties does not elucidate questions of fact'.⁴⁷ This is one great advantage of conciliation, since conciliators can play an inquisitorial role in investigating the facts of the dispute rather than relying solely upon the information submitted by the parties. A conciliation commission may have more of the necessary ability to examine the facts thoroughly than do individual States.

As has been mentioned in the previous section in the discussion concerning mediation, in cases where the States causing environmental damage cannot be easily identified, mediators may employ diplomatic techniques to approach the *potentially* responsible States and encourage them to enter the negotiation process. A conciliation commission cannot use such techniques, such as those concerning the art of using the political strength of conciliators or the technique of introducing special inducements into the disputants' calculations. Nor can the technique of exerting political pressure on the *potentially* responsible States be employed. This is because, as with arbitration, it has to be impartial, since it has 'no independent authority and carries no political clout'⁴⁸ in examining the dispute. However, it can be argued that, in theory, if the

⁴⁶ Cot, *International Conciliation* (n 20) 190.

⁴⁷ Ibid, 192.

⁴⁸ Cot, 'Conciliation' (n 45).

parties to a dispute authorise it to do so, a conciliation commission could approach a third State.

The determination of a breach of an international obligation: Another issue is whether conciliation is suitable for legal determination and issues of State responsibility, for example whether the facts relating to who is causing the pollution can be attributed to a particular State or whether the State has shown due diligence. This is a legal question in which conciliation does not appear to be suitable for engaging with legal consequences arising from a breach of international environmental obligations because conciliation, like mediation, does not primarily address legal issues although, in theory, it can perform this task if the parties so request.⁴⁹ Determining legal consequences under the rules of State responsibility could lead to a deterioration in the relationship between the parties which might make it difficult for them to accept.

1.2.4 Suitability for Quantifying Damages

In considering whether or not conciliation is suitable for quantifying environmental damages, one needs to ask, first, whether a conciliation commission could be entrusted with the task of awarding environmental damages. It is important to note that the quantifying of damages by a conciliation commission entails the application of traditional state responsibility in the context of international environmental problems, so that the question may be: Does this task contradict the nature of conciliation? Clearly, a conciliation procedure is a kind of diplomatic means of dispute settlement and such a procedure seems to help the disputants move towards compromise solutions rather than engaging in the issue of a State's responsibility. However, conciliation, by its very nature, still has a role to play in considering legal disputes. Unlike mediation that in its very nature is not a form of imposition, conciliation, as Susani observes, 'appears to be a method of dispute resolution which does not exclude questions of responsibility'.⁵⁰ In this sense, a conciliation commission can recommend environmental damages, although this task may be considered a secondary function as opposed to its primary task which is focused on reaching a compromise. Another reason that seems to justify the idea that conciliation can award environmental damages stems from the fact that a conciliation procedure is

⁴⁹ Susani (n 38) 1104.

⁵⁰ Ibid, 1100.

flexible and the parties still have autonomy and are able to control the process; therefore, the mandates of conciliation commissions are also determined by the parties. Consequently, it is clear, but unprecedented in the environmental field, that a conciliation commission can perform this task—if the parties agree to authorise it—of attempting to calculate environmental damages. The parties may determine this mandate of the conciliation commission in the agreement between them. An analogy can be made with the *Letelier and Moffit* case, where an inquiry was used for the same purpose.

Nevertheless, even though conciliation can engage in the quantifying of environmental damages, the effectiveness of conciliation in performing this task should not be over-emphasized. Susani is of the opinion that:

‘conciliation does not appear to be an effective method of engaging a State’s responsibility, since the law is not the principal basis of it. In contrast, if ARSIWA are seen as a tool allowing for the maintenance of good relations between States, then conciliation still has an important role to play’.⁵¹

Ultimately, the perception of a conciliation commission in relation to its role is crucial. If recommending damages would aggravate the situation or would endanger an amicable settlement, the conciliation commission may refuse to do so. Another option for a conciliation commission that wishes to refrain from touching upon the question of a State’s responsibility is to recommend *ex gratia* payments, without accepting formal legal responsibility. Obtaining *ex gratia* payments for environmental damage may retain the underlying philosophy of conciliation in reaching a compromise solution and maintaining good relations between States.

Secondly, does a conciliation commission have the ability to quantify environmental damages? Quantifying environmental damages is not an easy task which a conciliation commission can perform alone without any assistance from experts in other relevant fields. Although a conciliation commission is usually made up of international lawyers or diplomats,⁵² when faced with highly technical

⁵¹ Ibid, 1104. ARSIWA stands for the Articles on Responsibility of States for Internationally Wrongful Acts.

⁵² See for example the list of conciliators nominated under Article 2 of Annex V to UNCLOS, 38-44, available at <<https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXI/XXI-6.en.pdf>> accessed 14 September 2014.

questions, such commissions could readily avail themselves of the relevant expertise. For example, economists may help a conciliation commission to create a framework that can be used as a basis for the calculation of the damages to be paid by using economic theories such as the valuation of environmental resources.⁵³ A conciliation commission may propose these criteria as guidelines for the compensation of environmental damages or it may recommend the parties to set up working groups or compensation commissions specifically to perform this task specifically.

1.2.5 Suitability for Interpreting and Applying Procedural Obligations

The suitability of conciliation for the interpretation and application of procedural obligations can be appraised by considering the ability of conciliation commissions to handle the legal aspects of a dispute. Conciliators may encounter problems with the application of the law, since the parties may substantiate their claims by using legal argumentation. It is crucial to note that conciliators can interpret and apply international law in the settlement of disputes if the parties so request. This was evinced by the Italian-Swiss Permanent Conciliation Commission established under the Italo-Swiss Treaty of Conciliation and Judicial Settlement of 1924, in which the parties asked the Commission to interpret the law and it was deemed appropriate to consider in the first place the legal aspects of the dispute, enabling itself thereafter to take into account the factual element.⁵⁴ The role of law is apparent, since some model rules and multilateral treaties prescribe the mandate of a conciliator to take account of legal matters. For instance, the PCA's Environmental Rules for Conciliation include a clause concerning the role of the conciliator when conducting the conciliation proceedings, stating that he may take into account 'the relevant law'.⁵⁵ In addition, the legal conclusions could be incorporated into the final report of the conciliation commission. This can be seen, for example, in a clause in UNCLOS that suggests that conciliators shall include all questions of law that are relevant to the matter in dispute in its recommendations as the commission may deem appropriate.⁵⁶ The legalistic element that is incorporated in the conciliation clauses of multilateral treaties indicates that international environmental law will be applied to the dispute. It may be

⁵³ Tarcisio Hardman Reis, *Compensation for Environmental Damages under International Law: The Role of the International Judge* (Wolter Kluwer 2011) 132-133.

⁵⁴ Italian-Swiss Permanent Conciliation Commission, October 9, 1956, (1958) 25 ILR, 316. See also Merrills (n 34) 63.

⁵⁵ Art. 7 (3) of the PCA's Environmental Rules for Conciliation.

⁵⁶ Art. 7 (1) of Annex V to UNCLOS. See also Art. 2 of the Annex to Vienna Convention on the Law of Treaties (VCLT).

that there will be no difficulties for conciliators to interpret and apply procedural international environmental obligations, since a conciliation commission is usually—but not exclusively—composed of lawyers and diplomats.

As has been previously noted in section 1.1.5 above, procedural obligations, such as EIAs, have become well established in international environmental law, which can be discerned from State practice, and international courts have become inclined to accept those obligations as an integral component of international legal norms. The next question that may be raised as a corollary is whether and how far a conciliation commission can take those procedural obligations and aspects of environmental jurisprudence into account and use them as a basis for the preparation of the conciliators' proposal. A good illustration of this can be seen in the Report of the Conciliation Commission in the *Jan Mayen* case. In defining the terms of the settlement, the Conciliation Commission recognised the importance of State practice and court decisions by explicitly explaining that 'Although not a court of law, the Commission has thoroughly examined State practice and court decisions in order to ascertain possible guidelines for the practicable and equitable solution of the questions concerned'.⁵⁷ Thus, conciliators can, when suggesting the terms of settlement, recommend that disputants in an international environmental dispute should perform procedural obligations.

Proposing that the parties should perform certain environmental procedural obligations does not amount to 'pouring oil on the flames', to borrow Cot's words.⁵⁸ This is because procedural obligations are soft-control measures corresponding to a strategy of conciliation that attempts to avoid controversial legal assessments as much as possible, without any judgments being passed, or national sovereignties being violated.⁵⁹

⁵⁷ *Jan Mayen Continental Shelf (Iceland v. Norway)* (Report and Recommendations to the Government of Iceland and Norway) (1981) 62 ILR 108, 125.

⁵⁸ See section 1.2.2 of this chapter at footnote 45.

⁵⁹ Henri Rolin, 'L'Heure de la Conciliation Comme Mode de Règlement Pacifique des Litiges' (1957) AE 3, 19.

1.3 An Appraisal of Inquiry

1.3.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

Inquiry commissions have usually been constituted in order to settle bilateral disputes such as those in the *Dogger Bank* incident between the UK and Russia,⁶⁰ the *Red Crusader* incident between Denmark and the UK⁶¹ and the *Letelier and Moffitt* case between the US and Chile.⁶² Inquiry has never been used to investigate multi-party disputes. Nevertheless, it would be possible for several States to agree to establish an inquiry commission to identify disputed facts among them. An illustration of this possibility can be seen in Article 33 of the Watercourses Convention, where it is recognised that there may be a situation in which *two or more* parties have a dispute concerning the interpretation and application of the Convention. Inquiry is the only compulsory settlement procedure that may be invoked unilaterally by any of the parties after other methods fail.⁶³

Like mediation and conciliation, the allegation of a breach of an MEA with *erga omnes (partes)* obligations, it is possible that the disputants may agree to resolve their dispute through an inquiry which depends entirely on the willingness of all the parties. It is worth noting that under the Watercourses Convention, an inquiry can be initiated unilaterally by *any of the parties* to the Watercourses Convention if the parties are unable to settle a dispute through negotiations or non-judicial means.⁶⁴ By allowing any States parties to initiate an inquiry, it does correspond to the concept of obligation *erga omnes (partes)* in that it contains the element of community interest which goes beyond the interest of riparian States. This kind of interest can be traced

⁶⁰ Richard Ned Lebow, 'Accidents and Crises: The Dogger Bank Affair' (1978) 31 *NavalWarCollRev* 66; Tobias H Irmscher, 'Dogger Bank Incident (1904)' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006), online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1032?rskey=DyMer0&result=1&prd=EPIL>> accessed 27 June 2016.

⁶¹ See *The Red Crusader (Denmark v. UK)* (1962) 35 ILR 485; 29 RIAA 521. See also Gérard Timsit, 'Le Fonctionnement de la Procédure d'Enquête dans l'Affaire du Red Crusader' (1963) 9 AFDI 460; Ximena Hinrichs Oyarce, 'Red Crusader Incident (1961)' in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2007) online version available at <<http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1211?rskey=ULbq3Z&result=1&prd=EPIL>> accessed 27 June 2016.

⁶² Stefanie Schmahl, 'Letelier and Moffitt Claim' *inibid* (2008).

⁶³ See for more details Stephen McCaffrey, *The Law of International Watercourses* (2 edn, OUP 2007) 515-516.

⁶⁴ Art. 33 (3) of the Watercourses Convention. See also Alistair Rieu-Clarke, Ruby Moynihan and Bjørn-Oliver Magsig, *UN Watercourses Convention User's Guide* (IHP-HELP Centre for Water Law 2012) 242.

back to the jurisprudence of the PCIJ in the *River Oder* case where it touched upon this issue under the notion of a community of interest of riparian States in which it held that ‘This community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the uses of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others.’⁶⁵

1.3.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: As far as technical issues connected with international environmental issues are concerned, inquiry may assist the parties to clarify technical facts. While one State may rely on a particular set of scientific information when it claims that another State has committed a breach of its international environmental obligations, the other State may use other sources of information which are totally different from the latter to put forward counter-claims in the course of defending its position. Inquiry is suitable for settling environmental disputes which have a complex technical character, especially in the field of international watercourse disputes, because of the expertise represented on an inquiry commission. McCaffrey points out that a dispute ‘can often be most effectively avoided or resolved by referring questions to experts for investigation and report.’⁶⁶ In addition, membership of an inquiry commission is not limited to judges or lawyers but may also include technical and special experts.⁶⁷ In the Baglihar hydroelectric dam case, the parties appointed an expert, Professor Raymond Lafitte, a Swiss civil engineer, who acted with the assistance of hydrologists and also lawyers, to investigate some technical matters.⁶⁸

⁶⁵ *Case Relating to the Territorial Jurisdiction of the International Commission of the River Oder (Great Britain, Czechoslovakia, Denmark, France, Germany, and Sweden v. Poland)* (Judgment) [1929] PCIJ Rep Series A No 23, 27. There is a numerous literature that support the concept of community interest and common concern: see for example, Eyal Benvenisti, ‘Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law’ (1996) 90 AJIL 384, 384-415; Edith Brown Weiss, ‘The Coming Water Crisis: A Common Concern of Humankind’ (2012) 1 TEL 153, 153-168; Patricia Wouters and A. Dan Tarlock, ‘The Third Wave of Normativity in Global Water Law: The duty to Cooperate in the Peaceful Management of the World’s Water Resources: An Emerging Obligation Erga Omnes?’ 23 JWL 51, 51-65.

⁶⁶ Stephen C. McCaffrey, ‘Sixth Report on the Law of the Non-Navigational Uses of International Watercourses’ (UN Doc. A/CN.4/427 & Corr.1 and Add.1) YbILC, Vol II (1), 69, para. 57.

⁶⁷ See the introductory part (e) of PCA Optional Rules for Fact-Finding Commissions of Inquiry, 170.

⁶⁸ See <<http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1171996340255/BagliharSummary.pdf>> accessed 16 September 2014.

Questions relating to societal choice: The search for the causes of an incident is a primary function of any inquiry. An inquiry commission must provide ‘an intelligible account of the chain of events’⁶⁹ which means that it is certainly not confined to the legal aspects of a dispute. In the *Dogger Bank* incident, the parties requested the Commission to ‘inquire into and report on *all the circumstances*’ connected with the incident.⁷⁰ In some cases the parties would like to know the exact geographical point where the incident actually occurred.⁷¹ By the same token, in environmental disputes, the parties may agree to set up an international commission of inquiry to aid the resolution of a dispute as to the cause of, for example, transboundary pollution, to find out where the pollutions originated, as well as the surrounding circumstances giving rise to an international environmental dispute. For example, in an international watercourse dispute that involves the equitable utilisation of a watercourse, an inquiry has flexible procedures which can take non-legal factors into account, such as economic and societal considerations pertaining to the use of international waters.⁷²

1.3.3 Suitability for Identifying the Source of the Breach of an International Environmental Obligation

The identification of the facts giving rise to a dispute: The identification of the source of a breach may be considered as finding the facts giving rise to a dispute (e.g. the source of pollution). Thus, inquiry is a suitable means to discover which State is the origin of the environmental harm, since its primary function of it is to discover the truth of the incident or to find out *who did what, and when?* It may not be beyond the ability of the commissioners to inquire into the causes of transfrontier environmental problems involving two or more States. Inquiry, in a case where the causal link between environmental harms and the conduct of particular States is not firmly established, is a time-consuming and laborious task which requires the use of several techniques of inquiry. Generally, the techniques of finding facts include the reviewing

⁶⁹ Nissim Bar-Yaacov, *The Handling of International Disputes by Means of Inquiry* (OUP 1974) 77.

⁷⁰ Art. II of the Agreement of Submission: The International Commission of Inquiry Between Great Britain and Russia arising out of the North Sea Incident, reprinted in ‘Finding of the International Commission of Inquiry Organized under Article 9 of the Convention for the Pacific Settlement of International Disputes, of July 29, 1899: The International Commission of Inquiry between Great Britain and Russia arising out of the North Sea Incident’ (1908) 2 AJIL 929, 929.

⁷¹ See the *Tavignano, Camouna and Gaulois* cases between France and Italy, James Brown Scott (ed) *The Hague Court Reports* (OUP 1916) 417.

⁷² Attila Tanzi and Enrico Milano, ‘Article 33 of the UN Watercourses Convention: A Step Forward for Dispute Settlement?’ (2013) 38 WI 166, 167.

of written submissions of the parties or even NGOs, site visits to specific locations, and meetings with various environmental experts, and inquiry commissions are capable of doing all those things.

The determination of a breach of an international obligation: Once the facts have been determined, the next issue is whether inquiry can be used to consider legal questions with regard to the existence of a breach of an international environmental obligation and the legal consequences arising from such a breach. In practice, inquiry is not usually employed to address legal issues. Like mediation and conciliation, it is not suitable for performing such a task.

1.3.4 Suitability for Quantifying Damages

The question in this respect may be: Can an inquiry commission, apart from identifying the facts of a dispute, recommend environmental damages? The answer is that it depends entirely on the willingness of the parties to entrust an inquiry commission with the task of clarifying the compensation which falls within the purview of the responsibility-based paradigm. It may therefore be helpful to consider the practices of the international commissions of inquiry with a view to ascertaining how they approached this issue.

The issue of the responsibility of States was one of the central issues in the *Dogger Bank* incident, in which the parties mandated the Commission to inquire into ‘the question as to where responsibility lies, and the degree of blame attaching to the persons found responsible’.⁷³ The words and phrases that appeared in the Agreement for the Inquiry, namely *responsibility*, *degree of blame* and *person found responsible* might make one think that the parties mandated the Commission to exercise judicial functions. However, Bar-Yaacov explained that in this case the Commission exercised the investigatory function of finding out the ‘factual responsibility’ rather than ‘legal responsibility’ since ‘the finding that Admiral Rojdestvensky’ was responsible for giving the order to fire and for the resulting damage is in itself a finding of fact’.⁷⁴ What can be discerned from this explanation is that the legal consequences which flowed from the Commission’s findings and the finding of the facts which constituted a breach of international law are distinguishable from each

⁷³ See Art. II of the Finding of the International Commission of Inquiry Organized under Article 9 of the Convention for the Pacific Settlement of International Disputes, of July 29, 1899, by the International Commission of Inquiry between Great Britain and Russia Arising out of the North Sea Incident, reprinted at (1908) 2 AJIL 929, 929-930. See also Scott (n 71) 404.

⁷⁴ Bar-Yaacov (n 69) 76.

other. While the former is an issue for the parties or an arbitral tribunal attempting to consider the legal consequences, such as the payment of damages or the awarding of damages, the latter is perceived as genuinely a function for an inquiry commission to perform.⁷⁵ In addition, in this case the Commission was not asked to determine the amount of compensation that Russia should pay and the parties accepted the decision. On the basis of this finding, Russia was willing to pay damages of 65,000 pounds to the victims of the incident.⁷⁶ Therefore, whether or not compensation for damages will be paid depends largely on the will of the parties and how far they accept the findings of international commissions of inquiry.

Another pertinent case concerning compensation for damages is the *Letelier and Moffitt* case. In this case, the dispute arose between the US and Chile over the assassination in the US of Mr Orlando Letelier del Solar, the former Chilean Foreign Minister and Mrs Ronni Karpen Moffitt, a US citizen, by agents of the Chilean government. The US had sought compensation from Chile on behalf of the families of Letelier and Moffitt. The parties agreed to establish a commission, whose duties were to investigate and report upon the facts surrounding the incident⁷⁷ and to determine the amount of compensation to be paid, *ex gratia*, by Chile to the US for the death of those persons in accordance with the applicable principles of international law.⁷⁸ This case is very interesting because it shows that inquiry is a flexible method that can be used to determine the compensation due for any loss or damage, rather than solely discovering the facts of the dispute in the traditional sense. The Commission also determined and applied the principle concerning compensation that was established in the *Chorzow Factory* case.⁷⁹ The amount of compensation to be paid included, for example, the loss of financial support suffered by the families⁸⁰ and moral damages.⁸¹ The interesting point which is worth noting is that in determining the amount of the compensation the Commission referred to the jurisprudence of the PCIJ in relation to

⁷⁵ Ibid, 81.

⁷⁶ Irmscher (n 60) para. 8. See also the answer of Sir H. Campbell-Bannerman to the question put by Mr. Cremer in the House of Commons, HC Deb 12 November 1906, vol 164, cc1066-7.

⁷⁷ *Dispute concerning Responsibility for the Deaths of Letelier and Moffitt (US v. Chile)* (1992) 25

RIAA 1, 4

⁷⁸ Ibid, para. 1.

⁷⁹ Ibid, para. 21.

⁸⁰ Ibid, para. 26.

⁸¹ Ibid, para. 31.

the general principle of compensation in international law and the practice of the juridical organs of the inter-American system with regard to moral damages.⁸²

By way of analogy, it is possible that the parties to an international environmental dispute might entrust an inquiry commission with the task of determining environmental damages. Although some environmental damages cannot be calculated in financial terms, or by restoring the *status quo ante*, inquiry is a relatively flexible method in applying other useful approaches to environmental cases, for example by taking into account the practices of the UNCC and the International Oil Pollution Compensation Fund (IOPCF), including a method for assessing non-market environmental values.⁸³ However, the process of determining compensation, in the light of the UNCC experience, is far from easy, since it requires highly qualified commissioners who have the relevant expertise.

On this characteristic, since this is a consequence of a finding of a breach of an obligation, which is something that is normally beyond the competence of an inquiry commission, it follows that assessing compensation (or any other remedy) will also normally also be beyond their competence. However, as shown in the *Letelier and Moffitt*, the parties could ask an inquiry commission to determine damages but in this case the claim of payment was in the form of *ex gratia* payment through diplomatic channels in order to maintain goodwill between the parties without acknowledging any international legal responsibility. Thus, inquiry is unsuitable for recommending damages which are based on the responsibility-based paradigm.

1.3.5 Suitability for Interpreting and Applying Procedural Obligations

The next issue is whether an inquiry commission can clarify the interpretation and application of procedural obligations? Such interpretation and application is a matter of law which does not relate to fact-finding or the investigatory function of this method.

⁸² Ibid, para. 31.

⁸³ See generally in IOPCF, Claims Manual (October 2013 Edition) 38-40, reprinted at <http://www.iopcfunds.org/uploads/tx_iopcpublishations/claims_manual_e.pdf> accessed 22 June 2016. See also IMO and UNEP, *IMO/UNEP Guidance Manual on the Assessment and Restoration of Environmental Damage Following Marine Oil Spills* (CPI Books Limited 2009) 9-29.

Collier and Lowe have clearly stated that ‘This method of settlement, as the name suggests, does not involve *the investigation or application of rules of law*’⁸⁴ Birnie, Boyle and Redgwell are of the same opinion when they state that: ‘Commissions of inquiry will *normally deal only* with inquiry, a particularly important issue in many environmental disputes’.⁸⁵ It may be unusual for a commission of inquiry to suggest that the parties should accept certain procedural obligations, but what it can do is to ascertain some facts that are relevant to or are considered to be elements of procedural obligations. In this sense, a commission can do no more than provide assistance to the disputants in applying and interpreting the obligations by themselves, rather than dealing directly with the application or interpretation of legal obligations. This might arise, for example, in relation to the conduct of an EIA. If the terms of reference were to be drafted, the parties might request an inquiry commission to investigate and report on the following points:

a) The likelihood that a proposed activity may cause *substantial* pollution of or *significant* adverse impact on the environment (which is a question of fact),⁸⁶ thus triggering the obligation of the State proposing the activity to carry out an EIA. Inquiry can investigate the precise nature and effects of the planned activity or assess the risks of activities that are likely to cause significant environmental harm. The ILC’s Commentaries on its Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities rightly point out that ‘the term “significant” is not without ambiguity and a determination has to be made in each specific case. It involves more factual considerations than legal determination.’⁸⁷

b) If an EIA has been undertaken, an inquiry commission, if requested by the parties, could investigate the *degree of adequacy* of an EIA. The UNEP Goals and Principles provide that ‘the environmental effects in an EIA should be assessed with a degree of detail commensurate with their likely environmental significance.’⁸⁸ An inquiry commission would inquire into all the circumstances with a view to finding

⁸⁴ John Collier and Vaughan Lowe, *The Settlement of Disputes in International Law: Institutions and Procedures* (OUP 2000) 24 (emphasis added).

⁸⁵ Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (3 edn, OUP 2009) 264-265 (emphasis added).

⁸⁶ As in the Danube-Black Sea Deep Water Navigation Route case, see chapter 3, section 1.3.2.

⁸⁷ Draft articles on Prevention of Transboundary Harm from Hazardous Activities, with commentaries 2001, YbILC, Vol 2 Part 2, 52.

⁸⁸ Principle 5 of the UNEP Goals and Principles of Environmental Impact Assessment, see <<http://www.unep.org/regionalseas/publications/reports/rsrs/pdfs/rsrs122.pdf>> accessed 28 September 2014.

out whether the EIAs had already met internationally agreed standards. This is a factual determination.

c) If an EIA has been undertaken, an inquiry commission may investigate the time when the EIA was conducted to determine whether or not it had taken place *prior to* the implementation of the proposed project.⁸⁹ Investigating the exact timing of the initiation of an EIA can be considered as a factual determination.

2. AN APPRAISAL OF THE SUITABILITY OF ADJUDICATION IN SETTLING INTERNATIONAL ENVIRONMENTAL DISPUTES

It should be noted at the beginning of this section that adjudicative dispute settlement mechanisms, unlike diplomatic means, are suitable where the parties want a dispute to be decided according to rules of law with a binding outcome.

2.1 An Appraisal of Arbitration

2.1.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

Given that arbitration is bilateral in character, it can facilitate the settlement of disputes between two States. In practice so far most environmental disputes that have been referred to arbitration have been bilateral disputes such as that relating to transboundary air pollution, i.e. the *Trail Smelter* case or the utilisation of international rivers. However, traditional arbitration does admit that there can be more than one State on each side if they have the same interest. One example is the *Southern Bluefin Tuna* arbitration where there were two claimants, Australia and New Zealand. But one could think of more truly multilateral situations, such as say those of damage caused by climate change, where it would not be a simple case of one or more claimants against one or more respondents. The PCA rules seem to refer to the first type of multilateral situation referred to above as they envisage one or more claimants

⁸⁹ See *Pulp Mills* case, para. 205; *Certain Activities/Construction of a Road* cases, paras. 104 and 153; *Indus Waters Kishenganga Arbitration (Partial Award)*, para. 450; *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011) ITLOS, Seabed Disputes Chamber, para. 147.

bringing a case against one or more respondents in each case, not necessarily comprising States.⁹⁰

One of the advantages of arbitration, notably *ad hoc* arbitration, is that the rules of procedure may be selected beforehand so that the parties could choose suitable procedures for multilateral environmental disputes. There is the PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment that allow for multilateral disputes to be submitted to arbitration.⁹¹ It recognises that the Rules may be used in relation to disputes between *two or more* States with regard to access to and utilisation of natural resources.⁹² The language used in the PCA's Environmental Rules for Arbitration—such as in Article 3, which reads: '*the party or parties* initiating recourse to arbitration...shall give to *the other party or parties*...a notice of arbitration'—signify the possibility that there may be multiple claimants or multiple respondents in an international environmental dispute. It also provides for multiparty appointment of arbitrators in Article 7 (4) which states that where there is *more than one respondent*, the respondents shall jointly appoint an arbitrator.⁹³ These Rules can either be incorporated within the dispute settlement provision in a convention used for settling future disputes or else incorporated within a special agreement concluded after the dispute has arisen. Article 1 (1) states, 'all parties have agreed in writing that a dispute that...has arisen between them shall be referred to arbitration'. The Rules clarify that the phrase 'agreed upon in writing' would include a wide range of forms which are 'provisions in agreements, contracts, conventions, treaties, the constituent instrument of an international organization or agency or reference upon consent of the parties'. Moreover, it is not necessary that the parties should define their dispute as an environmental one in the first instance in order to adopt these Rules because they provide that 'the characterization of the disputes as relating to natural resources and/or the environment is not necessary for jurisdiction where all the parties have agreed to settle a specific dispute under these Rules'.⁹⁴ This provision does accept that the definition of the environment and of

⁹⁰ See the Guidelines for Adapting the PCA Arbitration Rules to Disputes Arising under Multilateral Agreements or Multiparty Contracts.

⁹¹ Hereinafter PCA's Environmental Rules for Arbitration, reprinted at <<https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-Arbitration-of-Disputes-Relating-to-the-Environment-and-or-Natural-Resources.pdf>> accessed 16 May 2106.

⁹² Ibid, 184.

⁹³ Ibid, Art. 7 (4).

⁹⁴ Art. 1 of the PCA's Environmental Rules for Arbitration.

natural resources is controversial. Consequently, the Drafting Committee of the Optional Rules intended to prevent any protracted debates between parties about such a definition.⁹⁵

Recently, PCA's Environmental Rules for Arbitration have been incorporated in the arbitration clause of the Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters to the 1992 Convention on the Protection and Use of Transboundary Waters and International Lakes and to the 1992 Convention on the Transboundary Effects of Industrial Accidents.⁹⁶ So far, there has been only one bilateral dispute between an investor and the State that has applied the Rules to the proceedings.⁹⁷ Given that arbitration is flexible, since the parties can choose the rules of procedures that can facilitate multiparty-disputes, this makes arbitration suitable for settling multilateral environmental disputes.

However, it depends on the willingness of the parties, since they can determine who can be involved in the process of dispute settlement. For example, the ability of States A, B and C to participate would depend either on all the parties agreeing to this or on the compromissory clause making provision for this. After a dispute arises, the disputing parties—which can be two or more than two States—may submit their dispute to arbitral tribunals either jointly by virtue of a special agreement (*compromis*) or by one party unilaterally referring the dispute to arbitration under a dispute settlement clause in an existing bilateral or multilateral treaty providing for the settlement of future disputes.

For *ante hoc* arbitration, procedural rules may be governed by a treaty conferring jurisdiction which concluded before a dispute arises. It can be said that if States choose to use the PCA Environmental Rules, this would increase the effectiveness of the arbitration, since it can bring potential parties into the process of dispute settlement in a case where the dispute involves multilateral parties.

⁹⁵ Dane P. Ratliff, 'The PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment' (2001) 14 LJIL 887, 891.

⁹⁶ See Art. 14, full text available at <http://www.unece.org/fileadmin/DAM/env/civil-liability/documents/protocol_e.pdf> (Not yet in force) accessed 17 June 2016.

⁹⁷ *Naftrac Limited (Cyprus) v. State Environmental Investment Agency of Ukraine*, Award of 4 December 2012, PCA (unreported). No further information is available for this case, since it was unreported by the PCA. This case was cited in Roda Verheyen and Cathrin Zengerling, 'International Dispute Settlement' in Cinnamon P. Carlarne, Kevin R. Gray and Richard Tarasofsky (eds), *The Oxford Handbook of International Climate Change Law* (OUP 2016) 243, at footnote 17.

Where a dispute involved an alleged breach of an MEA with *erga omnes partes* obligations, it would be possible for a State (acting as an agent of the international community) to initiate arbitration either by trying to find a treaty that provided for the unilateral initiation of arbitration, such as arbitration under the CBD⁹⁸ or the UNFCCC,⁹⁹ or with the agreement of the State that is alleged to be in breach. In the latter situation there is no guarantee that the State concerned will agree to arbitration.

2.1.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: In cases where technical issues are among the key questions of an international environmental dispute, there are several ways that can ensure that arbitral tribunals have sufficient capacity to decide scientific and other non-legal questions.¹⁰⁰

Firstly, due to the fact that the parties possess ultimate control over the procedure in *ad hoc* arbitration, they may include provisions concerning the procedures by which an arbitral tribunal may acquire or apprehend technical information from experts. For example, in the *Trail Smelter Arbitration*, Article II of the *compromis* provided that each party could designate a scientist to assist the Tribunal.¹⁰¹ In addition, Technical Consultants, assisted by meteorologists, were also appointed for the purpose of conducting extensive meteorological investigations and providing a report accordingly.¹⁰² The Tribunal used the Technical Consultants' findings as a source of information when examining the detailed régime relating to the restriction of the release of sulphur dioxide which could occur in the future by, *inter alia*, setting a standard known as the maximum permissible sulphur emissions.¹⁰³ What makes the appointment of technical experts to assist a tribunal particularly interesting is that they can play a very significant role in helping the tribunal to

⁹⁸ Art. 27 (3) (a) and Annex II, Part 1 of the CBD.

⁹⁹ Art. 14 (2) (b) of the UNFCCC.

¹⁰⁰ Gabrielle Kaufmann-Kohler, 'Arbitration and the Need for Technical or Scientific Expertise' in The International Bureau of the PCA (ed), *Arbitration in Air, Space and Telecommunications Law: Enforcing Regulatory Measures: Papers Emanating from the Third PCA International Law Seminar, February 23, 2001* (Kluwer Law International 2002) 286.

¹⁰¹ See Art. II, *Trail Smelter Arbitration*.

¹⁰² *Trail Smelter Arbitration*, 1966.

¹⁰³ Ibid, 1975. See also R. S. Dean and R. E. Swain, *Report Submitted to the Trail Smelter Arbitral Tribunal* (United States Government Printing Office 1944) 290-293.

resolve the dispute successfully.¹⁰⁴ Arbitral tribunals have adopted a proactive approach to consulting experts, as has been exemplified by several cases.¹⁰⁵ For example, in the *North Atlantic Coast Fisheries* case the parties agreed that if there was any question regarding the reasonableness and practical effects of any regulations related to fisheries, the Tribunal could refer such a question to a commission of three expert specialists in such matters.¹⁰⁶ In the *Bering Sea Fur-Seals Arbitration* a commission of experts was established for the purpose of finding the facts in connection with the life of seals and proposing measures for their protection and preservation.¹⁰⁷ In the *Arbitration between Guyana and Suriname*, although this was not an environmental case, which was decided by the Tribunal constituted under Annex VII to UNCLOS, the Rules of the Procedures explicitly provided that the Arbitral Tribunal may upon notice to the parties appoint one or more experts to report to it on the specific issues that are to be determined by the Tribunal.¹⁰⁸ The use of experts in this case was extensive. The Tribunal appointed Prof. Hans van Houtte, an international law professor, as the independent expert to review Suriname's proposal(s) for the removal or redaction of documents.¹⁰⁹ In addition, the Tribunal also appointed Mr. David H. Gray as the Tribunal's hydrographic expert to draw and explain the maritime boundary line between the two States in accordance with international hydrographic and geodetic standards.¹¹⁰

More recently, in the *South China Sea Arbitration*, the role played by the Tribunal-appointed experts was very important since the Arbitral Tribunal relied extensively on the relevant information provided by them in deciding the case.¹¹¹ It sought an independent opinion from the Professors of coral reef ecology to consider

¹⁰⁴ Gillian Mary White, *The Use of Experts by International Tribunals* (Syracuse University Press 1965) 160; Arthur K. Kuhn, 'The Trail Smelter Arbitration—United States and Canada' (1941) 35 AJIL 665, 666.

¹⁰⁵ Francesca Romanin Jacur, 'Remarks on the Role of *Ex Curia* Scientific Experts in International Environmental Disputes' in Nerina Boschiero and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013) 449.

¹⁰⁶ Art. III of the Special Agreement between the United States of America and Great Britain (27 January 1909), see *The North Atlantic Coast Fisheries Case (UK v. US)* (1909) 11 RIAA 167, 176.

¹⁰⁷ *Bering Sea Fur Seals Arbitration*, 799 and 808.

¹⁰⁸ Art. 11 (3) Rules of Procedure for the Arbitral Tribunal Constituted under Annex VII to UNCLOS Pursuant to the Notification of Guyana dated 24 February 2004.

¹⁰⁹ Order N° 3, 12 October 2005. See also Order N° 4, 12 October 2005.

¹¹⁰ Order N° 6, 27 November 2006. See also Award of the Arbitral Tribunal Constituted Pursuant to Article 287, and in accordance with Annex VII of UNCLOS in the Matter of an *Arbitration Between Guyana and Suriname*, 17 September 2007, para. 108.

¹¹¹ See Art. 24 of the Rules of Procedure with regard to the appointment of independent expert, available at <http://www.pcacases.com/web/sendAttach/233> (accessed 23 November 2016).

whether China's engagement in harvesting of endangered species¹¹² and in artificial island-building activities had caused severe damage to the marine environment.¹¹³ It is undeniable that in the case like this in which scientific environmental information is very crucial for the weighing evidence, the Arbitral Tribunal could not evaluate the facts without the assistance of the experts.

A second way in which arbitral tribunals may be suitable for deciding technical questions is if the parties to a dispute appoint relevant technical experts as the arbitrators.¹¹⁴ A particularly clear illustration of this may be seen in the *Indus Waters Kishenganga Arbitration* where Howard S. Wheeler, a professor of hydrology, was appointed as one of the arbitrators.¹¹⁵ By appointing a hydrological expert as one of the arbitrators, the tribunal could properly deal with the question of whether or not India could deplete or bring the reservoir level of a run-of-river Plant below the Dead Storage Level (DSL) under any circumstances. Without scientific knowledge it would have been difficult for the tribunal to have applied the facts to the law in order to find out whether India had breached the Indus Waters Treaty. It is interesting to note that India argued, in its objection to the admissibility of the case, about the appropriateness of the tribunal for settling this highly scientific and complex question by claiming that such questions should be handled by a Neutral Expert rather than by the arbitral tribunal. Nevertheless, the tribunal was relatively confident about its capability to deal with such technical issues because the composition of the arbitral tribunal 'points to its competence in technical matters'.¹¹⁶ The fact that a highly qualified engineer was one of the arbitrators meant that the tribunal was a suitable forum to deal with technical issues.¹¹⁷ For this reason, the tribunal rejected India's arguments in this respect and held that 'no dispute brought before a court of arbitration could be rendered inadmissible merely on the ground that it involved a technical question'.¹¹⁸

¹¹² See for example in the *South China Sea Arbitration*, paras. 848, 851, 955, 957

¹¹³ See for example in *Ibid*, paras. 855, 857, 977, 978-983.

¹¹⁴ Higgins also says that 'the *ad hoc* formation of a tribunal can enable the necessary non-legal expertise to be found among the arbitrators'. See Rosalyn Higgins, 'The Desirability of Third-Party Adjudication: Conventional Wisdom or Continuing Truth?' in J.E.S. Fawcett and Rosalyn Higgins (eds), *International Organization: Law in Movement: Essays in Honour of John McMahon* (OUP 1974) 44.

¹¹⁵ Para. 4 (b) (ii) of Annexure G to the Indus Waters Treaty.

¹¹⁶ *Indus Waters Kishenganga Arbitration*, para. 486.

¹¹⁷ *Ibid*, para. 486.

¹¹⁸ *Ibid*, para. 487.

The question of the role of experts applies equally to arbitration tribunals set up under certain mechanisms, for example, the role of the experts prescribed by the PCA's Environmental Rules for Arbitration. The Rules allow an expert to play a significant role in settling environmental disputes. They provide the option that the parties can appoint arbitrators who possess expertise and experience in environmental issues—both on legal and scientific issues—from the lists provided by the Secretary General.¹¹⁹ However, the parties are not limited to choosing from the PCA lists but they can choose from among their own candidates. If an arbitral tribunal is faced with technical difficulties it may appoint one or more experts to provide a report on specific issues.¹²⁰ The Rules also provide for the appointment of expert witnesses from the list provided by the Secretary General in a case where there is a conflict between the parties relating to scientific evidence that has been presented by both parties.¹²¹ It can be said that the Rules put significant emphasis on the role of experts. Thus, arbitration under the auspices of the PCA is desirable for the settling of technical and complex questions in international environmental disputes.¹²²

As far as the expertise of arbitral tribunals under UNCLOS are concerned, according to Annex VII of UNCLOS, every State Party can nominate an arbitrator who has some experience of maritime affairs.¹²³ What is clear from this provision is that it allows a person who is not a lawyer to be able to sit on the bench, although in practice all Annex VII arbitrators used so far have been lawyers. Annex VIII of UNCLOS goes even further than Annex VII in respect of the nomination of experts when it provides that the Parties shall be entitled to nominate experts who are knowledgeable about fisheries,¹²⁴ the protection and preservation of the marine

¹¹⁹ See Art. 6, Art. 8 (3) and Annex 2 Specialized Panel of Arbitrators Established Pursuant to the Optional Rules for Arbitration of Disputes Relating to the Environment and/or Natural Resources (3 July 2012). See also Annex 8 Specialized Panel of Scientific Experts Established Pursuant to the Optional Rules for Arbitration of Disputes Relating to the Environment and/or Natural Resources (3 July 2012).

¹²⁰ Art. 27 of the PCA's Environmental Rules for Arbitration.

¹²¹ See Annex 8 Specialized Panel of Scientific Experts Established Pursuant to the Optional Rules for Arbitration of Disputes Relating to the Environment and/or Natural Resources.

¹²² Manuel Indlekofer, *International Arbitration and the Permanent Court of Arbitration* (Kluwer Law International Law 2013) 313-316 and 354-355.

¹²³ Art. 2 of Annex VII. It should be noted that the parties are not limited to selecting arbitrators from the UN Secretary General's list.

¹²⁴ See the list at

<http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIsept2001fao.pdf> accessed 17 June 2016.

environment,¹²⁵ marine scientific research¹²⁶ or navigation.¹²⁷ Thus, a dispute may be more satisfactorily resolved.

Questions relating to societal choice: Turning now to questions about societal choice that are associated with international environmental disputes, arbitration is an appropriate mode for settling non-legal disputes or it may be conferred to act as an ‘amiable compositeur’.¹²⁸ That is to say it may detach itself from merely legal questions and take particular factors—such as political, economic and social choices—into consideration when deciding a case if the parties to a dispute explicitly agree to this. An arbitral tribunal can decide a case *ex aequo et bono*, and may only take a decision *ex aequo et bono* if that is explicitly authorized by the parties. If it is not so authorized it is difficult to see how a tribunal could take societal and other factors into account. The desires of the parties may even be one of the bases for making a decision that the tribunal has to bear in mind. The *Trail Smelter Arbitration* may stand as an example of this, where the parties clearly stated in Article IV of the Convention For The Final Settlement Of The Difficulties Arising Through Complaints Of Damage Done In The State Of Washington By Fumes Discharged From The Smelter Of The Consolidated Mining And Smelting Company, Trail, British Columbia that ‘*The Tribunal...shall give consideration to the desire of the High Contracting Parties to reach a solution just to all parties concerned.*’¹²⁹ A question that may arise in this respect is what was a solution just to all? It may be that the parties did not want the tribunal to apply the law but simply wanted the interests of both the affected farmers and the owners of the smelter (the Consolidated Mining and Smelting Company ‘Cominco’) to be taken into account.¹³⁰ What the tribunal actually did in this case was a solution which was just to all the parties and that would allow the continuation of the operation of the smelter on the one hand and ensure that

¹²⁵ See the list at

<http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIInov2002unep.pdf> accessed 17 June 2016.

¹²⁶ See the list at

<http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIImay2011iocunesco.pdf> accessed 17 June 2016.

¹²⁷ See the list at <http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIimo.pdf> accessed 17 June 2016.

¹²⁸ Loretta Malintoppi, ‘Methods of Dispute Resolution in Inter-state Litigation: When States Go to Arbitration Rather Than Adjudication’ (2006) 5 LPIC 133, 153.

¹²⁹ The Convention For The Final Settlement Of The Difficulties Arising Through Complaints Of Damage Done In The State Of Washington By Fumes Discharged From The Smelter Of The Consolidated Mining And Smelting Company, Trail, British Columbia, (15 April 1935) 162 LNTS 73 (emphasis added).

¹³⁰ *Trail Smelter Arbitration*, 1939.

the damage would not occur in the future on the other.¹³¹ As McCaffrey convincingly states: ‘the Tribunal must have believed the high standard to be necessary in achieving a balance or “just” resolution...: do not shut down or curtail the operations of the smelter unless it is demonstrably causing some serious damage’.¹³²

2.1.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

The identification of the facts giving rise to a dispute: The suitability on this matter is concerned with the investigatory powers of an arbitral tribunal and its technical expertise in ascertaining the sources of the breach. Normally, a tribunal does not play an active role in finding the facts that are pertinent to a dispute except in a case where the parties agree that a tribunal should inquire in depth into a question of fact. It normally relies on the information presented by the parties in their written submissions in which they must prove that an actual breach has occurred, rather than performing the task of an inquiry itself. If environmental harm cannot be clearly identified, it is hard for the tribunal to settle the dispute. There must be an actual wrongdoer State not being merely a potential wrongdoer State. The practice of the arbitral tribunal in affirming the cause of damage in the *Trail Smelter Arbitration* also signified the need for a high degree of burden of proof for a State to invoke the responsibility of another State for damages.¹³³ The tribunal pronounced that the injury would have to be established by ‘clear and convincing evidence’.¹³⁴ Undoubtedly, if an arbitral tribunal takes this approach, then some environmental disputes will not be settled since the party cannot easily establish the causal connection between the source of the pollution and injury.¹³⁵ Thus, arbitral tribunals are not well suited for discovering the facts giving rise to an environmental dispute where these are uncertain.

¹³¹ Ibid, 1939.

¹³² Stephen McCaffrey, ‘Of Paradoxes, Precedents, and Progeny: The Trail Smelter Arbitration 65 Years Later’ in Rebecca M. Bratspies and Russell A. Miller (eds), *Transboundary Harm in International Law: Lessons from the Trail Smelter Arbitration* (CUP 2006) 40.

¹³³ Nicolai Nyland, ‘What May Be the New International Environmental Law?’ in Christoffer C. Eriksen and Marius Emberland (eds), *The New International Law: An Anthology* (Martinus Nijhoff Publishers 2010) 262; Alexander Gillespie, *Conservation, Biodiversity and International Law* (Edward Elgar Publishing 2011) 465.

¹³⁴ *Trail Smelter Arbitration*, 1965.

¹³⁵ Elli Louka, *International Environmental Law: Fairness, Effectiveness and World Order* (CUP 2006) 477.

The determination of a breach of an international obligation: Arbitration usually decides a case on the basis of law.¹³⁶ It is well suited for determining whether those facts, when known, constitute the breach of an international environmental obligation and what are the legal consequences arising from such a breach in the light of the rules of State responsibility, which are the legal issue.

2.1.4 Suitability for Quantifying Damages

There seem to be three distinct questions: (1) Is a tribunal empowered to award compensation where this is considered to be an appropriate form of reparation for the breach of an international obligation? (2) Does a tribunal have the expertise and the means to determine the amount of compensation? (3) Are there adequate rules of international law to guide a tribunal?

For the first question, since a tribunal has an inherent power to decide whether a State has breached an international obligation, it follows that it must also have an inherent power to decide on the consequences of a breach, i.e. what remedy should be awarded (again, unless it is explicitly prohibited by the parties from doing so). This function may be clearly set out in a dispute settlement clause annexed to a particular treaty or in a special agreement concluded after a dispute arises, so that arbitrators are obliged to follow the instructions of the parties. As in the *Trail Smelter Arbitration*, one of the duties that was imposed upon the Tribunal was to award compensation.¹³⁷

The second question is concerned with the expertise of a tribunal to calculate the amount of damages. Undoubtedly, the calculation of damages is not about the art of interpretation of the law but arbitrators need experts from the other sciences to assist them. It is much more difficult if it has to calculate environmental damages in monetary terms. The *Trail Smelter Arbitration* still stands as the only instance of a case in which the arbitral tribunal quantified damages in monetary terms.¹³⁸ The tribunal awarded 78,000 US dollars for the transboundary pollution damage caused by the Trail Smelter. It is useful to look at the processes whereby the arbitral tribunal assessed and calculated these damages in order to assess the suitability of arbitration as a mode of dispute settlement. The outcome of the award of the tribunal has provoked criticism from scholars about the way in which the tribunal took this

¹³⁶ See chapter 3, section 2.1.1.

¹³⁷ *Trail Smelter Arbitration*, 1911.

¹³⁸ This is not surprising because in inter-State litigation generally it is not common for judicial bodies to award compensation. Satisfaction (e.g. a declaration that a State has breached an international obligation) is the usual remedy.

approach. Alfred Rubin said that the arbitral tribunal focused merely on the tangible damage which was measurable only in monetary terms and did not touch upon the issue of intangible damage, such as the compensation for the damage caused to the environment.¹³⁹ He interestingly asked questions which the tribunal left unanswered i.e. ‘What money damages result from so polluting the air that eagles are endangered as a species? Or sparrows? What is the present value of saplings whose market value cannot be determined for another fifty years? Or wild flowers? Must injury be suffered before international responsibility is fixed?’¹⁴⁰

The third question is concerned with the adequacy of international law which can provide guidance with regard to environmental damages. International law relating to this matter is sparse. One guidance that can be referred to is UNCC’s approach, which can give an idea of how to assess damages. However, arbitration is flexible in terms of its applicable law. That is to say, apart from the fact that a tribunal can choose the applicable law of its own accord, the parties can ask the tribunal to apply the law concerning environmental damage or the current practice in relation to this matter by putting the applicable law in the *compromis* which is not limited to international law. In the *Trail Smelter Arbitration* the applicable law used for determining the damage was also the tort law concept of damage in domestic law. The *compromis* empowered the tribunal to apply ‘the law and practice followed in dealing with cognate questions in the United States of America as well as international law and practice’.¹⁴¹ The tribunal’s findings show that it relied on the practice of the American courts relating to ‘nuisance’ or ‘trespass’.¹⁴² Therefore the compensable damage would be considered in the light of the reduction in the value of the land caused by the fumigations.¹⁴³ For the farm land, the reduction of value was calculated on the basis of, for example, the amount of the reduction of the crop yield arising from injury to crops.¹⁴⁴ Although the tribunal did not take into account the issue of environmental damage that could not be calculated in monetary terms, one lesson can be drawn from the *Trail Smelter Arbitration*, namely that the *compromis* can refer to

¹³⁹ Alfred P. Rubin, ‘Pollution by Analogy: The Trail Smelter Arbitration’ (1970-1971) 50 Or L Rev 259, 273.

¹⁴⁰ Ibid, 273.

¹⁴¹ Tuomas Kuokkanen, *International Law and the Environment: Variations on a Theme* (Kluwer Law International 2002) 90.

¹⁴² *Trail Smelter Arbitration*, 1925.

¹⁴³ Ibid.

¹⁴⁴ Ibid.

the practice which should be adopted in the case. Applying this to the present-day context, the parties could make reference to, for example, the relevant practice of the French Court of Cassation which has just recognised and confirmed the decision of the Court of Appeal in the *Erika* Judgement on the possibility of obtaining compensation for pure environmental damage, which is described as ‘damage to non-marketable environmental resources that constitute a legitimate collective interest’.¹⁴⁵ Therefore, it can be said that the applicable law for calculating environmental damages may not be confined to international law. The parties may request a tribunal to apply other laws or practices if they see that it will help a tribunal to deal with this issue.

2.1.5 Suitability for Interpreting and Applying Procedural Obligations

Given that the interpretation and application of procedural obligations are matters of law, arbitration is a legal settlement of a dispute in which it is bound to apply and interpret the law. Thus, arbitration is a suitable forum for interpreting and applying procedural obligations found in treaties or crystallised as customary international law. Procedural obligations have been developed relatively well, as is reflected in several arbitral decisions. To begin with the obligation to notify, the *Lac Lanoux Arbitration* seems to be the first significant arbitral case that mentioned the procedural obligations in the context of the utilisation of waters. When initiating the scheme concerning the diversion of waters, the tribunal held that the State ‘could not be denied the right to insist on notification of works or concessions which are the object of a scheme’.¹⁴⁶

As far as the obligation to exchange information and consultation is concerned, this can be discerned from the pronouncements of the arbitral tribunal in the *MOX Plant* case. In this case, the tribunal affirmed the provisional measures prescribed by ITLOS that requested the parties to cooperate and enter into consultation in order to ‘exchange further information with regard to possible consequences for the Irish Sea arising out of the commissioning of the MOX plant’.¹⁴⁷

¹⁴⁵ IOPC, *Incidents Involving the IOPC Funds 2013* (IOPC 2014) 9 available at <http://www.iopcfunds.org/uploads/tx_iopcpublishations/incidents2013_e.pdf> accessed 19 June 2016; and see the judgment of the French Court of Cassation at <http://www.courdecassation.fr/IMG/Crim_arret3439_20120925.pdf> accessed 19 June 2016. See also Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (3 edn, CUP 2013) 754-755.

¹⁴⁶ *Lac Lanoux Arbitration*, para. 21.

¹⁴⁷ See *MOX Plant* case, para. 89 (1) (a); *MOX Plant* case, Order N° 3 (Suspension Proceedings on Jurisdiction and Merits, and Request for further Provisional Measures) 24 June 2013, 20.

In the same line, with the decision of the *MOX Plant* case, the tribunal in the *Land Reclamation* case also ordered Malaysia and Singapore to enter into consultation with a view to exchanging information on—and assessing the risks or effects of—Singapore’s land reclamation works.¹⁴⁸

Turning to the obligation to conduct an EIA, the *Land Reclamation* case provides an illustration of how the tribunal accepted the importance of conducting an EIA when it ordered the parties to form a group of independent experts to conduct a study in relation to the effects of Singapore’s land reclamation.¹⁴⁹ Another case is the *Indus Waters Kishenganga Arbitration*, where the tribunal found it appropriate to interpret and apply the Indus Waters Treaty in the light of ‘the customary international principles for the protection of the environment in force today’.¹⁵⁰ One of the principles that the tribunal mentioned in its decision was the customary international law principle that requires a State to conduct an EIA. The tribunal just reaffirmed this procedural obligation by quoting the full statement concerning EIA that appeared in the *Pulp Mills* case.¹⁵¹

One may conclude that, in practice, the arbitral tribunals have not found themselves in a difficult position in affirming procedural obligations.

2.2 An Appraisal of the International Courts

2.2.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

In appraising the suitability of the international courts for the settling of international environmental disputes which are bilateral or multilateral in character, it is appropriate to consider their pre-established rules of procedure to see whether they can facilitate the settling of these types of international environmental disputes.

The rules of procedure of the international courts are essentially based on the principle of bilateralism in that ‘there are two parties in contentious cases, and that for third parties an adversarial contentious proceeding is *res inter alios acta*’.¹⁵² Although

¹⁴⁸ *Land Reclamation* case, para. 106 (1) (b).

¹⁴⁹ *Land Reclamation* case, para. 106 (1) (a) (i).

¹⁵⁰ *Indus Waters Kishenganga Arbitration*, para. 452.

¹⁵¹ *Pulp Mills* case, para. 450.

¹⁵² Shabtai Rosenne, *The Law and Practice of the International Court 1920-2005: Volume III Procedure* (4 edn, Martinus Nijhoff Publishers 2006) 1439. See also Terry Douglas Gill, *Litigation*

bilateral environmental disputes fit relatively well with the bilateral dispute settlement paradigm of international litigation, some problems remain unresolved. The jurisdiction of international courts over international environmental disputes is one of the most obvious problems. The jurisdictional problem has attracted particular criticism from several scholars.¹⁵³ The main argument which they have put forward arises from the fact that most international environmental cases have been brought before the judicial bodies in which their jurisdiction was based upon the compromissory clause provided in particular bilateral treaties. In the case of the ICJ, it could not exercise its jurisdiction over those issues that fall outside the scope of the compromissory clause, even though such environmental harms are germane to the case.¹⁵⁴ As was shown in the *Pulp Mills* case, the Court found that it had no jurisdiction over the environmental issues concerning visual, noise and odours pollution since Article 36 of the 1975 Statute provided no basis for the claim advanced by Argentina.¹⁵⁵ Thus, the environmental issues arising from this case might not be able to be handled in a comprehensive way. In order to decide the case more comprehensively by applying rules of international law that they consider relevant to the dispute, all States should make a declaration under Article 36 (2) of the Statute that is free of any reservations concerning environmental disputes.¹⁵⁶ Nonetheless, given the current practice on this provision, the likelihood of this happening is remote in the extreme. Even though the States accept the compulsory jurisdiction, there is a possibility that some States may make a declaration excluding environmental issues from the jurisdiction of the international courts.¹⁵⁷

With the ITLOS, the question of jurisdiction is more complex. Firstly, an environmental dispute may cover matters falling both *within* and *outside* UNCLOS,

Strategy at the International Court: A Case Study of the Nicaragua v. United States Dispute (Martinus Nijhoff 1989) 91.

¹⁵³ Tim Stephens, *International Courts and Environmental Protection* (CUP 2009) 21-27; James Harrison, 'Reflections on the Role of International Courts and Tribunals in the Settlement of Environmental Disputes and the Development of International Environmental Law' (2013) 25 JEL 501, 503-506; Alan Boyle and James Harrison, 'Judicial Settlement of International Environmental Disputes: Current Problems' (2013) 4 JIDS 245, 250-256.

¹⁵⁴ It should be noted that this is less of an issue for ITLOS which has an extremely broad jurisdictional clause covering all disputes relating to UNCLOS.

¹⁵⁵ *Pulp Mills* case, para. 52.

¹⁵⁶ See Art. 36 (2) of the ICJ Statute. Harrison (n 153) 505; Boyle and Harrison (n 153) 253

¹⁵⁷ In the ICJ, the States which made the declaration were as follows: Barbados, India, Malta, New Zealand, the Philippines and Poland.

as exemplified in the *Southern Bluefin Tuna* case,¹⁵⁸ but the ITLOS can only deal with the former aspects. Secondly, the ITLOS can only be used if both parties to a dispute have made a declaration selecting it as their preferred means of settlement (in practice relatively few States have done so)¹⁵⁹ or the parties to a case that has been referred to Annex VII arbitration agree to refer it to the ITLOS, as has happened in several cases, e.g. the *Swordfish* case in which the case was transferred to a Special Chamber of ITLOS.¹⁶⁰

For multilateral environmental disputes involving several States, it is possible for two or more States to be joined together as multiple applicants¹⁶¹ or multiple respondents¹⁶² as happened in environmental cases, for example, in the *Southern Bluefin Tuna* case and *Nuclear Tests* cases.¹⁶³ This situation may be called a ‘plural party’ situation.¹⁶⁴ Doing that upholds the bilateral paradigm of judicial dispute settlement, since the parties are grouped into two procedural parties in which each group shares the same interest. Therefore, litigating in such a situation may cause the same sort of jurisdictional problems as in cases such as the pollution of international watercourses in which a numbers of States, such as three or four affected riparian States, wish to jointly institute proceedings. For example, if States A, B and C allege that State D has polluted an international river that flows through all those States and has caused serious damage to the ecological system of the river, which means that

¹⁵⁸ In this case, the dispute also centered on the Convention for the Conservation of Southern Bluefin Tuna. See the *Southern Bluefin Tuna* cases, para 45.

¹⁵⁹ See the Declaration of States Parties Relating to Settlement of Dispute in Accordance with Article 287 (Choice of Forum), available at <https://www.itlos.org/fileadmin/itlos/documents/basic_texts/287_declarations_041111_english.pdf> accessed 23 June 2016.

¹⁶⁰ See also the *M/V Saiga (No.2) Case (Saint Vincent and the Grenadines v. Australia)*, Judgment, (1999) 38 ILM 1323.

¹⁶¹ See *Case Relating to the Territorial Jurisdiction of the International Commission of the River Order (Great Britain, Czechoslovakia, Denmark, France, Germany, and Sweden v. Poland)* (Judgment) [1929] PCIJ Rep Series A No 23; *The S.S. “Wimbledon” (France, Great Britain, Italy, and Japan v. Germany)* (Judgment) [1923] PCIJ Rep Ser. A No. 1 and *Interpretation of the Statute of the Memel Territory (Great Britain, France, Italy, Japan v. Lithuania)* (Preliminary Objection) [1932] PCIJ Series A/B No 47.

¹⁶² See *Monetary Gold Removed from Rome in 1943 (Italy v. France, UK, US)* (Judgment) [1954] ICJ Rep 19.

¹⁶³ These cases were parallel proceedings. The former was the cases between New Zealand v. Japan and Australia v. Japan, the latter was the cases between New Zealand v. France and Australia v. France. The cases may originally have been begun as two sets of separate proceedings, but in each, the two cases were joined.

¹⁶⁴ See Santiago Torres Barnárdez, ‘Bilateral, Plural and Multipartite Element in International Judicial Settlement’ in Nisuke Ando and others (eds), *Liber amicorum judge Shigeru Oda* (Kluwer International Law 2002)1002.

State D is breaching its environmental obligations which are set out in an international agreement relating to the use of this river and which has been concluded between them. It may be possible for States A, B and C—the potential parties—to instigate contentious proceedings in the ICJ and become the parties to the dispute. However, there could also be a problem with jurisdiction, e.g. if States A and D had made declarations under the optional clause, but B and C had not. Also, it is still doubtful how the judicial bodies would handle a situation where a large number of States suffer a breach of environmental obligations, such as climate change cases. In a case where more than one State would like to file a complaint, the suitability of the international courts is still questionable.

One may put the question that: Would the intervention be a procedure that can broaden the participation of the other potential parties so that they can participate in the proceedings? As for the ICJ, the intervention may be granted under Article 62 of the ICJ Statute.¹⁶⁵ A State will intervene without having the status of being a party but as an intervener that wishes to defend an interest of a legal nature which might be affected by the decision in the case. However, it is doubtful whether a State can intervene as a party. There is a possibility of party intervention in a case where one or both of the parties in the proceedings give consent to the intervention. As Hugh Thirlway observes, this is not a clear proposition to the effect that an intervention as a party will be allowed under Article 62 or ‘whether it follows simply from an application of the principle of consent as creative of international jurisdiction’.¹⁶⁶

As far as the typology of intervention in the ICJ is concerned, there are two Articles that provide certain conditions that States need to fulfill before they can intervene in a case. Under Article 62 of the ICJ Statute, a State has to provide proof that its interests of a legal nature may be affected by a decision, which is very difficult to prove where actual environmental damage may be difficult to quantify.¹⁶⁷ Thus, the possibility in a case where several States, without being directly injured, could intervene in proceedings under this Article with a view to protecting common

¹⁶⁵ Art. 62 of the ICJ Statute provides for this. Third-party intervention in the ITLOS’s proceedings is provided in Arts. 31-32 of the ITLOS Statute and Arts. 99-104 of the ITLOS Rules which correspond to the intervention in the ICJ.

¹⁶⁶ Hugh Thirlway, *The Law and Procedure of the International Court of Justice: Fifty Years of Jurisprudence* (OUP 2013) 1857.

¹⁶⁷ See Christine Chinkin, ‘International Environmental Law in Evolution’ in T. Jewell and J. Steele (eds), *Environmental Decision-Making: National, European, and International Perspectives* (OUP 1998) 253.

interests is very low. This led Wolfrum to say that ‘this form of intervention is not suited to serve community interests; it is tailored to the traditional bilateral approach toward solving international disputes’.¹⁶⁸

As has been mentioned in chapter 2, there has been a burgeoning of environmental obligations that are owed to the international community and any breach of such obligations involves the interests of the international community as a whole. Consequently, international courts in which the procedures are inherently bilateral may not be the proper fora to address multilateral environmental disputes.¹⁶⁹

In an international environmental context, sceptics often question the way in which the international courts are equipped with appropriate rules and procedures that allow public interest international environmental cases to be litigated.¹⁷⁰ More concretely, if *erga omnes* treaties have been breached, for example the climate change Conventions or the CBD, the question that needs to be asked in connection with this issue is who has the standing to bring a claim against a breaching State.

In answering these questions, the jurisprudence of the international courts must be examined to ascertain whether and to what extent they have accepted the *erga omnes* character of the obligations relating to the protection of the global environment which may give rise to their having standing before them. The ICJ has not touched upon the issue of global environmental protection directly. But in the *Question Relating to the Obligation to Prosecute or Extradite* case between Belgium and Senegal the ICJ held in the context of the Convention against Torture which has an *erga omnes partes* character that ‘any State party to the Convention may invoke the responsibility of another State party with a view to ascertaining the alleged failure to comply with its obligations’.¹⁷¹ Applying this approach to the environmental context, all States parties have an interest in compliance with international

¹⁶⁸ Rüdiger Wolfrum, ‘Interventions in Proceedings Before International Courts and Tribunals: To What Extent May Interventions Serve the Pursuance of Community Interests?’ in Nerina Boschiero and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013) 229.

¹⁶⁹ Rosenne (n 152) 1597; Alan Boyle, ‘Saving the World?’ Implementation and Enforcement of International Environmental Law Through International Institutions’ (1991) 3 JEL 229, 229-230.

¹⁷⁰ Phoebe N. Okowa, ‘Environmental Dispute Settlement: Some Reflections on Recent Developments’ in Malcolm D. Evans (ed), *Remedies in International Law: The Institutional Dilemma* (Oxford Hart 1998) 164-167; Markus Benzing, ‘Community Interests in the Procedure of International Courts and Tribunals’ (2006) 5 LPICT 369, 376; Tim Stephens, ‘The Limits of International Adjudication in International Environmental Law: Another Perspective on the Southern Bluefin Tuna Case’ (2004) 19 IJMCL 177, 195; Peter H. Sand, ‘Compensation for Environmental Damage from the 1991 Gulf War’ (2005) 35 EPL 244, 248.

¹⁷¹ *Question relating to the Obligation to Prosecute or Extradite (Belgium v. Senegal)* (Merits) [2012] ICJ Rep 422, para. 69 (emphasis added) (hereinafter the *Belgium v. Senegal* case).

environmental obligations under MEAs which have an *erga omnes partes* character and they may sue any State party that they consider to be in breach of their obligations under the MEA, although they may not qualify as directly injured States. However, this position has not yet been clearly confirmed by the ICJ although it had a chance to address this issue in the *Whaling* case.

In that case, the ICJ did not question Australia's standing to challenge Japan's alleged non-compliance with the Whaling Convention. This would imply that all the other States parties to the Convention which share a common interest could raise the issue of a breach to their obligation to protect whales. However, the Court did not expressly address this matter in its Judgment,¹⁷² but it seems that the obligations embodied in the Whaling Convention are obligations *erga omnes partes* in that each and every party has the standing to bring a case before the Court without having to demonstrate that it is specially affected by the breach of such obligations.¹⁷³ Comparing the *Belgium v. Senegal* case with the *Whaling* case, one will find that the Court adopted the same approach with regard to the question of *actio popularis*.¹⁷⁴ However, it is probably too early to draw a general conclusion that the ICJ will grant standing in future environmental cases, since it did not hold expressly any view about the scope of this right and the appropriate remedies thereof.¹⁷⁵ There still remains the problem whether: As in these two cases the parties' standing relied on the treaties, is

¹⁷² The issue of standing appeared only in the oral proceedings where Australia attempted to claim that it aimed at the protection of the collective interest under the ICRW Convention: see the answer of Professor Laurence Boisson de Chazournes to the question put by Judge Dalveer Bhandari in which he asked 'What injury, if any, has Australia suffered as a result of Japan's alleged breaches of the ICRW through JARPA II?' CR 2013/13 (3 July 2013) p.73 and CR 2013/18 (9 July 2013), paras. 14 and 19, pp. 28 and 33-34. See also *Whaling* case (Declaration of Intervention of New Zealand) [2013] ICJ Rep 3, Separate Opinion of Judge Trindade, paras. 58-60.

¹⁷³ Andreas Zimmermann, 'Between the Quest for Universality and its Limited Jurisdiction: The Role of the International Court of Justice in Enhancing the International Rule of Law' in Giorgio Gaja and Jenny Grote Stoutenburg (eds), *Enhancing the Rule of Law Through the International Court of Law* (Martinus Nijhoff Publishers 2014) 44; Boyle and Harrison (n 153) 260. See also James Crawford, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (CUP 2002) para. 10, 278.

¹⁷⁴ See Yukiko Harimoto, 'The ICJ Judgment on the Whaling Case: Some Reflections' (2014) 3 AALCO J Intl L 31, 40; Hamamoto Shotaro, 'Procedural Questions in the Whaling Judgment: Admissibility, Intervention and Use of Experts' (The Honorable Shigeru Oda Commemorative Lectures ICJ Judgment on Whaling in the Antarctic: Its Significance and Implications) 6, available at <http://www.edu.kobe-u.ac.jp/ilaw/en/whaling_docs/2014manuscript_Hamamoto.pdf> accessed 17 May 2016.

¹⁷⁵ Christine Gray, 'Current Development: The 2014 Judicial Activity of the ICJ' (2015) 109 AJIL 583, 592. However, Crawford opines that 'The remedies sought by Australia, which invokes Japan's obligations *erga omnes partes* under the Whaling Convention and *erga omnes* in the context of environmental protection under CITES and the Convention on Biological Diversity, coincide with the remedies available under ARSIWA Article 48(2) and do not include any reparation in the sole interest of the Applicant.' James Crawford, *State Responsibility: The General Part* (CUP 2013) 373.

it possible for a State to bring a case in the absence of a multilateral treaty by claiming that they are representing the international community as a whole? The answer is still unclear.

There are also signs of a more open attitude towards standing with regard to obligations *erga omnes partes*. In 2011, the Seabed Disputes Chamber of the ITLOS held that *each State Party* to the UNCLOS 'may also be entitled to claim compensation in light of the *erga omnes* character of the obligations relating to preservation of the environment of the high seas and in the Area.'¹⁷⁶ To support this view, it referred to Article 48 of the ILC Draft Articles on State Responsibility which certainly suggests the possibility of cases being brought by non-injured States.¹⁷⁷

In protecting the marine environment from seabed activities conducted in the Area, there is a possibility for the International Seabed Authority (the Authority), an autonomous international organisation, to initiate contentious proceedings against member States or contractors in the Sea-Bed Disputes Chamber.¹⁷⁸ Since the Authority is an international organisation that is established under UNCLOS and the 1994 Agreement, it can probably be said that the Authority is endowed with the legal personality to act on behalf of the international community as a whole.¹⁷⁹ Therefore, a multilateral environmental dispute in this case may be taken to litigation by the international body rather than by individual States.

2.2.2 Suitability for Settling Disputes of a Multi-Dimensional Character

In appraising the suitability of the international courts when they are faced with international environmental disputes that have a multi-dimensional character, two points need to be examined, namely 1) the capabilities of the courts and tribunals to handle the complexities of scientific and technical arguments put forward by the parties in the case, and 2) the ways in which the courts and tribunal deal with the complexity of questions about societal choice.

Questions relating to scientific and technical issues: To begin with the complexities of scientific and technical issues, the parties usually bring to the

¹⁷⁶ *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011) ITLOS, Seabed Disputes Chamber, para. 180.

¹⁷⁷ Art. 48 provides that 'Any State other than an injured State is entitled to invoke the responsibility of another State in accordance with paragraph 2 if: (a) the obligation breached is owed to a group of States including that State, and is established for the protection of a collective interest of the group; or (b) the obligation breached is owed to the international community as a whole.'

¹⁷⁸ Art. 187 of UNCLOS.

¹⁷⁹ Art. 137 (2) of UNCLOS.

proceedings a large amount of scientific evidence to support their claims in international environmental disputes.¹⁸⁰ It should be noted from the outset that the task of the international courts is to interpret international law and evaluate all the evidence presented by the parties in order to determine whether their claims that the other party is breaching international environmental obligations are supported by sufficient evidence, rather than to assess scientific evidence to determine the existence of international environmental harm.¹⁸¹ In addition, in the oral phase, expert witnesses may be introduced by the parties and this will also require the cross-examination of the experts by each party.¹⁸²

It is apparent that, apart from their recognized competence in international law, the ICJ or ITLOS judges are unlikely to possess expertise in relation to scientific issues,¹⁸³ and this is one of the bases of the criticism that they are unsuitable for considering environmental disputes. However, a court has the option to seek information from or arrange for the attendance of a witness or an expert to give evidence on its own initiative before applying scientific facts to international law in order to make sound legal decisions on these matters.¹⁸⁴

Despite the fact that the ICJ has the power to appoint experts to give technical opinions, it appears to be reluctant to do so.¹⁸⁵ In the *Pulp Mills* case, the Court felt that it was capable of assessing the scientific evidence for itself when the Court stated that:

¹⁸⁰ Catherine A. Cooper, 'The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms' (1986) 24 Canadian Ybk Intl L 247, 251; Elihu Lauterpacht, *Aspects of the Administration of International Justice* (Cambridge Grotius Publications Limited 1991) 17. Judge Peter Tomka has accepted that 'scientific evidence will play a key role' in environmental disputes, see the Statement by H.E. Judge Peter Tomka, President of the International Court of Justice, at the Plenary Session of the St. Petersburg International Legal Forum, 15 May 2013, 2, available at <<http://www.icj-cij.org/presscom/files/4/17374.pdf>> accessed 27 May 2016.

¹⁸¹ *Pulp Mills* case, para. 236. See Joint Dissenting Opinion of Judges Al-Khasawneh and Simma in this case at para. 4. See also Harrison (n 153) 509.

¹⁸² Art. 65 of the ICJ Rules.

¹⁸³ The selection of the 21 judges of the ITLOS is not based on scientific or technical criteria, but it is based on having the highest reputation for fairness and integrity and of recognized competence in the field of the law of the sea: see Art. 2 of Annex VI to UNCLOS. See David Anderson, 'Scientific Evidence in Cases Under Part XV of the LOSC' in Myron H. Nordquist and others (eds), *Law, Science and Ocean Management* (Martinus Nijhoff Publishers 2007) 511-512.

¹⁸⁴ Art. 50 of the ICJ Statute and Art. 62 of the ICJ Rules. For the ITLOS see Art. 289 of UNCLOS and Art. 15 of the ITLOS Rules.

¹⁸⁵ Anna Riddell and Brendan Plant, *Evidence before the International Court of Justice* (British Institute of International and Comparative Law 2009) 353; Kolb states that '[u]p to the present time it has (perhaps excessively) refrained from appointing its own experts' see Robert Kolb, *The International Court of Justice* (Alan Perry tr, Hart Publishing 2013) 929. See also Art. 289 of UNCLOS.

‘It is the responsibility of the Court, after having given careful consideration to all the evidence placed before it by the Parties, to determine which facts must be considered relevant, to assess their probative value, and to draw conclusions from them as appropriate’.¹⁸⁶

This paragraph provoked a serious dissent from Judges Al-Khasawneh and Bruno Simma. They criticised the failure of the Court to resort to experts when assessing and evaluating highly complex scientific and technological facts before arriving at the final conclusion that Uruguay had not breached its substantive obligations. In their view ‘the Court on its own is not in a position adequately to assess and weigh complex scientific evidence of the type presented by the Parties’.¹⁸⁷

In the *Whaling* case, scientific evidence was also important in determining whether Japan had breached its obligations in authorizing and implementing JARPA II in the Southern Ocean. In this case, scientific experts were called on by the parties to provide both written statements and oral observations. There were also examinations and cross-examinations of the experts and the judges also had a chance to ask the experts questions. However, the Court did not seek the assistance of other external sources of expertise under Article 50 of the ICJ Statute but relied solely on the scientific experts called by both parties, where the central issue was whether the JARPA II was ‘scientific research’ and whether it existed for ‘purposes of scientific research’. In order to determine the legality of this programme, the Court needed to consider various complicated technical issues—such as the use of lethal sampling, the selection of whale sample sizes etc—which would have required experts to assist the Court in attempting to weigh the evidence and reach a decision.¹⁸⁸ There are several places in the judgment where the Court attempted to separate the function of the Court in applying the law and the function of appraising scientific evidence.¹⁸⁹

¹⁸⁶ *Pulp Mills* case, para. 168.

¹⁸⁷ Ibid, Joint Dissenting Opinion of Judges Al-Khasawneh and Simma, para. 4.

¹⁸⁸ Makane Moïse Mbengue, ‘Between Law and Science: A Commentary on the Whaling in the Antarctic Case’ (2015) 14 QIL 3, 11. See also *Whaling* case, Dissenting Opinion of Judge Owada, para. 24 where he is of the opinion that ‘this Court, as a court of law, is not professionally qualified to give a scientifically meaningful answer, and should not try to pretend that it can’.

¹⁸⁹ The Court held that ‘there is no need...to examine generally the concept of “scientific research”’ *Whaling* case, para. 127. See also these paragraphs on the subject of how the Court treated scientific evidence: ‘it is not called upon to resolve matters of scientific...policy’ para. 69, ‘their conclusion (scientific opinions) as scientists...must be distinguished from the interpretation of the Convention’ para. 82, ‘the Court is also not in a position to conclude whether a particular value for a given

Obviously, judges are not scientists and therefore they need the assistance of experts, who should be independent, to examine, evaluate and weigh scientific facts, rather than party-appointed experts who will be less impartial than independent court-appointed experts.¹⁹⁰

With regard to the use of experts by the ICJ, Sir Robert Jennings once noted that the ICJ frequently resorts to invisible experts or *experts fantômes*. He noted that the Court ‘has indeed not infrequently employed cartographers, hydrographers, geographers, linguists, and even very specialised legal experts to assist in the understanding of the issues in a case before it; and has not on the whole felt any need to make this public knowledge or even to apprise the parties.’¹⁹¹ *Experts fantômes* have the drawback that the parties cannot cross-examine them or comment on their reports so that it may affect the transparency and openness of the Court in hearing cases as well as undermining the Court’s evidential weight.¹⁹² The ICJ tends not to change its position in not resorting to court-appointed experts so that scientific questions may not be handled appropriately.¹⁹³

Questions relating to societal choice: As far as the complexities of questions about societal choice are concerned, the international courts are not an appropriate forum to answer questions relating to social, economic and political choices. This is

variable...has scientific advantages over another’ para.172 and ‘such an inquiry is not to second-guess the scientific judgments made by individuals scientists or by Japan’ para.185. See further comments by Tullio Scovazzi, ‘Between Law and Science: Some Considerations Inspired by the Whaling in the Antarctic Judgment’ *ibid* 13, 25.

¹⁹⁰ The ICJ in the *Corfu Channel* case stated that Court-appointed experts could provide ‘every guarantee of correct and impartial information’ see *Corfu Channel* case, 21. See also the Speech by H.E. Judge Rosalyn Higgins to the Sixth Committee of the General Assembly (2 November 2007) 3, available at <<http://www.icj-cij.org/presscom/files/3/14123.pdf>> accessed 27 May 2016>. See also Christian J. Tams, ‘Article 50’ in Andreas Zimmermann and others (eds), *The Statute of the International Court of Justice: A Commentary* (2 edn, OUP 2012); Christian J. Tams, ‘Article 51’ in Andreas Zimmermann and others (eds), *The Statute of the International Court of Justice: A Commentary* (OUP 2012) 1304-1305.

¹⁹¹ Robert Jennings, ‘International Lawyers and the Progressive Development of International Law’ in Jerzy Makarczyk (ed), *Theory of International Law at the Threshold of the 21st Century: Essays in Honour of Krzysztof Skubiszewski* (Kluwer Law International 1996) 416 (emphasis added).

¹⁹² Lucas Carlos Lima, ‘The Evidential Weight of Experts before the ICJ: Reflections on the Whaling in the Antarctic Case’ (2015) 6 *JIDS* 621, 629.

¹⁹³ Judge Tomka expressed strong confidence in the ‘ability (of the ICJ) to address an extremely intricate factual complex, digest a fact-heavy record and, most importantly, handle highly scientific evidence’ in the Whaling case. Judge Peter Tomka, Speech at the 66th Session of the ILC, (22 July 2014) 9, available at <<http://www.icj-cij.org/presscom/files/6/18376.pdf>> accessed 27 May 2016; Romano claims that the reasons why the international courts and tribunals are reluctant to rely on external experts are, *inter alia*, the fear that experts will enter the judges’ province so that they might have to abdicate the judicial function and the reluctance of the courts to pay for experts from their own tight budget. See more details in Cesare Romano, ‘The Role of Experts in International Adjudication’ in Société Française pour le Droit International (ed), *Le Droit International Face aux Enjeux Environnementaux* (A. Pedone 2010) 181-187.

because their primary task is to interpret and apply international law rather than taking other social factors into consideration. In judicial proceedings the question must be: *what is the law that is to be applied in the case?* As was mentioned in chapter two, environmental policy may differ from State to State. A recent example is Japanese whaling policy that runs against the policy of other members of the IWC to amend commercial whaling.¹⁹⁴ No matter how different the opinions of Japan and the antiwhaling States were, when this issue was brought to the ICJ the Court could examine only the law that was applicable to the case, which was Article VII of the ICRW, paragraphs 10 (e) and (d), paragraph 7 (b) and paragraph 30 of the Schedule of the ICRW. Moreover, it stated that

‘The Court is aware that members of the international community hold divergent views about the appropriate policy towards whales and whaling, but it is not for the Court to settle these differences.’¹⁹⁵

It is possible, if the parties agree, to permit the courts and tribunals to decide a case on the basis of ‘*ex aequo et bono*’ or equitable considerations. However, no parties have yet requested the international courts to do so in international environmental disputes.

2.2.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

The question is: Do the ICJ or ITLOS have any investigatory power in this regard? As with arbitration, the international courts rely on the facts presented to them by the parties rather than finding out the facts by themselves. Disputants play a crucial role in convincing the ICJ or ITLOS to adjudicate according to their requests. Thus, the sources of harm and the responsible State should, to some extent, be identified. When instituting contentious proceedings, the claimant State will argue or claim that the other State is breaching an international obligation. If it cannot identify who is the breaching State, it is impossible to bring a claim before the international courts because an applicant State must indicate in its application the State against which the claim is being brought.¹⁹⁶

Taking litigation over climate change as an example, it is possible that a small island State located in the Pacific Ocean may make a decision to sue the US in the

¹⁹⁴ See Keiko Hirata, ‘Why Japan Supports Whaling’ (2005) 8 JIWL 129, 136.

¹⁹⁵ *Whaling* case, para. 69.

¹⁹⁶ Art. 38 (1) of the ICJ Rules. See also the same provision in Art. 54 (1) of the ITLOS Rules.

ICJ, claiming that the US has emitted CO₂ and contributed to climate change, which in turn may have an adverse effect on its territory by causing it to sink under the ocean as sea levels rise. There are at least four questions in this example: (1) has the US emitted CO₂?; (2) have these emissions caused sea level rise?; (3) if so, is the degree of US emissions sufficient on their own to have caused sea level rise to the extent that it has inundated the applicant?; and (4) do the US emissions constitute a breach of an international obligation? Questions (1) – (3) are factual (scientific) questions and therefore a court is not well-suited to deal with them in the case where the source of harm could not be easily identified. The proving of the causal relationship between the wrongful conduct and the damage produced may not be an easy task. This is because there is uncertainty surrounding the causes of climate change. The question may be asked whether the sinking of the claimant State can be wholly or even partially attributed to the actions or omissions of the defendant State.¹⁹⁷ The contributions to climate change may not necessarily come solely from human causes but also from natural causes.¹⁹⁸ As for question (4), it is a legal question which a court is well suited to answer if it has reliable answers to questions (1) – (3).

As the international courts do not investigate questions of which States have caused environmental harm, a claimant State may also face legal obstacles in determining the responsible State because environmental harm may arise from the cumulative actions of several States in polluting the environment.¹⁹⁹ For this reason, the affected State might not have any convincing evidence to demonstrate that a cause-and-effect relationship exists between a breach of international obligations and the ensuing damage. The standard of proof that the Court may apply when it is exercising its determinative function is relatively high because the claimant has to provide *clear evidence* of the ‘facts which it has found to have existed’²⁰⁰ when

¹⁹⁷ See Michael G. Faure and André Nollkaemper, ‘International Liability as an Instrument to Prevent and Compensate for Climate Change’ (2007) 43A Stan J Int’l L 123; René Lefebvre, ‘Climate Change and State Responsibility’ in Rosemary Rayfuse and Shirley V. Scott (eds), *International Law in the Era of Climate Change* (Edward Elgar Publishing 2012) 338.

¹⁹⁸ Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis* (2013) 124, reprinted at <<http://www.ipcc.ch/report/ar5/wg1/>> accessed 28 May 2016.

¹⁹⁹ Tullio Scovazzi, ‘Some Remarks on International Responsibility in the Field of Environmental Protection’ in Maurizio Ragazzi (ed), *International Responsibility Today: Essays in Memory of Oscar Schachter* (Martinus Nijhoff Publishers 2005) 217.

²⁰⁰ *Pulp Mills* case, para. 168.

claiming that the environment is being polluted by the defendant State.²⁰¹ In the *Pulp Mills* case, Argentina could not successfully convince the Court that Uruguay had breached its substantive obligation to prevent pollution and preserve the aquatic environment because it failed to provide clear evidence to substantiate its claims. With regard to the issue concerning the use of technology for pulp manufacturing that is said to have been used in a way that was such as to cause harm to the environment, Argentina presented scientific evidence but the Court held that ‘*no clear evidence has been presented by Argentina establishing that the Orion (Botnia) mill is not in compliance with the 1975 Statute.*’²⁰² In several paragraphs the Court stated that it was not convinced by the evidence provided by Argentina and it also mentioned that the causal nexus between Uruguay’s actions and the harmful effects on the river environment did not seem to the Court to have been established. The Court observed in relation to the presence of harmful substances that ‘Argentina has not however...adduced *clear evidence which establishes a link between the nonylphenols found in the waters of the river and the Orion (Botnia) mill.*’²⁰³

It should be noted that the *Pulp Mills* case was bilateral in character. In this case, the source of harm (Uruguay) and the victim (Argentina) were clearly identifiable but the victim failed to provide clear evidence to demonstrate any breach of substantive obligations.²⁰⁴ In multilateral environmental disputes involving multiple tortfeasors it is, *a fortiori*, even harder to prove the identity of the breaching State, such as CO₂ emitters or land-based polluters, and also the causal relationship is difficult, if not impossible, to establish. Consequently, the international courts may not be the appropriate place to settle international environmental disputes that exhibit these characteristics.

²⁰¹ For the determinative function of the Court in a situation where the Court is asked to determine whether a party has breached its obligations see Katherine Del Mar, ‘The International Court of Justice and Standards of Proof’ in Karine Bannelier, Theodore Christakis and Sarah Heathcote (eds), *The ICJ and the Evolution of International Law : the Enduring Impact of the "Corfu Channel" Case* (Routledge 2012) 104.

²⁰² *Pulp Mills* case, para. 225. See also para. 264 of the Judgment where the Court observed that ‘...with respect to water quality...the record does not show *any clear evidence* that substances with harmful effects have been introduced into the aquatic environment’.

²⁰³ Ibid, para. 257. See also para. 259 where the Court held that ‘The Court considers that there is *no clear evidence to link* the increase in the presence of dioxins and furans in the river to the operation of the Orion (Botnia) mill’ and in para. 262 the Court held that ‘The record rather shows that *a clear relationship has not been established* between the discharges from the Orion (Botnia) mill and the malformations of rotifers, or the dioxin’ (emphasis added).

²⁰⁴ See also in the *Certain Activities/Construction of a Road* cases, paras. 119, 136 and 223.

2.2.4 Suitability for Quantifying Damages

As a preliminary point, it should be noted that when international obligations are found to have been breached, the breaching State has a duty to make reparations, of which compensation may be one form which can be awarded to the injured State. The international courts have the power to enforce this duty. A reference can be made to the *Chorzów Factory* case in which the PCIJ addressed the question of compensation for damage in general international law.²⁰⁵

A breach of international environmental obligations falls within the general principle. In the *Gabčíkovo-Nagymaros* case concerning environmental damage, the ICJ accepted the difficulty involved in quantifying damages and stressed the importance of vigilance and prevention instead. It noted that damage to the environment often has an ‘irreversible character’ which in turn exposes ‘the limitations inherent in the very mechanism of reparation of this type of damage’.²⁰⁶

One may ask whether international courts have the expertise and the means to determine the amount of damages when dealing with environmental disputes. Quantifying damages for environmental harm may be a difficult and complicated task which means that international judges alone cannot handle this issue effectively without the assistance of experts in the other fields related to the environment. The UNCC, which was established as a result of Iraq’s invasion and occupation of Kuwait, illustrates how multi-disciplinary teams of experts can assist in quantifying environmental damage and the depletion of natural resources. According to Olufemi Elias, a legal adviser at the UNCC, the F4 Panel, where claims with regard to environmental damage may be heard and compensation may be sought, was assisted by experts in subjects ‘such as chemistry; toxicology; biology (including microbiology, marine biology, biological oceanography, marine zoology and plant pathology); medicine; epidemiology; environmental, ecological and natural resource economics; geology (including geochemistry, hydrology, geo-ecology); atmospheric sciences; oil spill assessment and response; rangeland management and

²⁰⁵ *Factory at Chorzów (Germany v. Poland)* (Claim for Indemnity) (Merits) PCIJ Ser. A, No 17 (1928) 61; *Fisheries Jurisdiction* case, para. 72. See generally in Thomas A. Mensah, ‘Environmental Damages under the Law of the Sea Convention’ in Jay E. Austin and Carl E. Bruch (eds), *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (CUP 2000) 226-249.

²⁰⁶ *Gabčíkovo-Nagymaros* case, para. 140.

accounting.²⁰⁷ It is doubtful how far the international courts would be willing to seek the assistance of experts to determine reparation for environmental damage and how far they would take the practice of the UNCC into account.

2.2.5 Suitability for Interpreting and Applying Procedural Obligations

For the purpose of assessing the suitability of the international courts for the purpose of interpreting and applying procedural environmental obligations, it might be appropriate to examine the function of the international courts. Interpretation and application of procedural obligations are a matter of law and, basically, they are a judicial activity. It is the process whereby the international courts attempt to interpret the meaning of a text and determine the consequences, which according to the text, should follow in a given situation.²⁰⁸ As they encompass the resolution of disputes on the basis of law decided by judges who have competence in international law, the international courts are a suitable forum to perform this task.

As far as the normative content of procedural obligations is concerned²⁰⁹, they are now not in a state of flux in which States should avoid litigation in international courts.²¹⁰ The *Pulp Mills* case confirms this assertion. The ICJ interpreted and confirmed that the obligation to conduct an EIA had attained the status of ‘general international law’²¹¹ by looking at the practice of States, which is supported by *opinio juris*, before giving this authoritative statement.²¹² Also, the ICJ clarified the circumstances in which an EIA must be carried out.²¹³ As Judge Kooijmans observed in his separate opinion in the *Fisheries Jurisdiction* case, where international law is in a state of flux, litigation should be avoided and thus a State ‘may prefer to settle such disputes by other means than judicial settlement because it is convinced that such other means may lead to a resolution of the issue which in the end will be more

²⁰⁷ Olufemi Elias, ‘The UN Compensation Commission and Liability for the Costs of Monitoring and Assessment of Environmental Damage’ in Malgosia Fitzmaurice and Dan Sarooshi (eds), *Issues of State Responsibility Before International Judicial Institutions* (Hart Publishing 2004) 228.

²⁰⁸ See this explanation in the Harvard Law School Draft Convention on the law of treaties commentary, Harvard Law School, ‘Article 19: Interpretation’ (1935) 29 AJIL (Supplement: Research in International Law) 937, 938.

²⁰⁹ See chapter 2 for an explanation of the obligations to notify, inform and consult.

²¹⁰ Vaughan Lowe, ‘The Function of Litigation in International Society’ (2012) 61 ICLQ 209, 215.

²¹¹ *Pulp Mills* case, para. 204. See also *Seabed Opinion*, paras. 145-147.

²¹² See Peter Tomka (n 180) 2.

²¹³ *Pulp Mills* case, para 205. The Court held that an EIA must be carried out prior to the implementation of a project which is likely to cause significant transboundary harm. See also the *Certain Activities/Construction of a Road* cases, para. 104.

satisfactory for all States concerned.’²¹⁴ When procedural obligations become a core issue of the case, the international courts have not found themselves in an awkward position where they would have to decide unfamiliar concepts.²¹⁵ Thus, they are suitable for the purpose of interpreting and applying environmental procedural obligations.

3. AN APPRAISAL OF THE SUITABILITY OF NON-COMPLIANCE PROCEDURES IN SETTLING INTERNATIONAL ENVIRONMENTAL DISPUTES

For the purpose of making an appraisal of the suitability of NCPs, it should be noted from the outset that the non-compliance mechanisms established under MEAs are not identical, but they vary to a greater or lesser extent. In addition, NCPs are only suitable for trying to resolve disputes relating to the interpretation or application of MEAs that have an NCP mechanism. They cannot be used for the generality of environmental disputes, unlike diplomatic means and unlike courts and arbitral tribunals (subject to some reservations about their jurisdiction). There is no single universal mechanism to deal with non-compliance questions. This section will attempt to answer the questions of suitability by considering some of the common characteristics that are shared among different NCPs as a basis for the discussion and it will attempt to draw the appropriate conclusions therefrom. It should be noted that NCPs are not necessarily, or perhaps even primarily, dispute settlement bodies.

3.1 Suitability for Settling Disputes that may be Bilateral in Multilateral in Character

Their suitability for settling a bilateral dispute may be tested by considering the designs of the triggering mechanisms under particular NCPs. If the settlement of disputes by international courts in essence consists of a bilateral procedure, the same is true for some NCPs that have adopted a bilateral approach to the settling of disputes by compliance committees (hereinafter CC). The system of triggering the procedures for non-compliance proceedings by a State party with respect to another party is shown in the submission by Romania alleging that Ukraine had failed to observe its obligations concerning EIA under the Espoo Convention, or the case where Romania

²¹⁴ *Fisheries Jurisdiction* case, Separate Opinion of Judge Kooijmans, 492, para. 10.

²¹⁵ See generally in Ilias Plakokefalos, ‘International Courts and Tribunals and the Implementation of International Environmental Law’ in Sandrine Maljean-Dubois and Lavanya Rajamani (eds), *La mise en oeuvre du droit international de l’environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011) 484-488.

alleged that Ukraine had breached the obligations set out in the Aarhus Convention.²¹⁶ In addition, NCPs are not constrained by the consent-based system in which the consent of all the parties needs to be obtained before the instigating of proceedings. In this sense, NCPs are suitable to be chosen for this role in settling bilateral disputes.

With regard to the number of parties that can bring a non-compliance issue before the CC, there are some NCPs, such as the Espoo Convention,²¹⁷ the Montreal Protocol,²¹⁸ the LRTAP,²¹⁹ the Aarhus Convention,²²⁰ and the Protocol on Water and Health, which clearly provide that a submission may be brought before the Committee by *one or more parties*.²²¹ Thus, some NCPs are suitable for settling multilateral environmental disputes arising from a particular MEA. In relation to multilateral international environmental disputes involving a breach of multilateral treaty obligations owed to all the States which are parties, the questions that need to be raised for the purpose of appraising the suitability of NCPs is: Whether NCPs can facilitate the settlement of multi-party international environmental disputes in ways that allow States parties other than injured States the standing to seek compliance with MEAs which have an *erga omnes partes* character and the breach of which affects all the States parties equally?

What can be found is that those NCPs with triggering processes that were designed to allow *any other* State party to initiate proceedings are well suited to the notion of *erga omnes partes* which underlies several MEAs.²²² Some of these NCPs allow any party to trigger compliance procedures with respect to another party's compliance which is often referred to as a *party-to-party trigger* with no requirement that the submitting States must be injured or specifically affected States. It should be observed that since the objective of NCPs is to protect a 'common treaty interest',²²³ any party can trigger these proceedings, regardless of the infringement of any individual interest, because breaches of obligations under MEAs 'usually affect all

²¹⁶ See chapter 3, section 3.2.1.

²¹⁷ Para. 5 of the Decision III/2 Review Compliance.

²¹⁸ Para. 1 of the Report of the 10th Meeting of the MOP, UNEP/OzL.Pro.10/9.

²¹⁹ Para. 4 (a) of the Report of the 14th Session of the Executive Body, Decision 1997/2, Doc. ECE/EB.AIR/53 (7 January 1998).

²²⁰ Para. 15 of section IV of the Decision I/7 on Review of Compliance, Doc. ECE/MP.PP/2/Add.8 (2 April 2004).

²²¹ Para. 14 of the Water and Health NCP.

²²² Alessandro Fodella, 'Structural and Institutional Aspects of Non-Compliance Mechanisms' in Tullio Treves and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C. Asser Press 2009) 366.

²²³ See for example in the preamble of the ITPGRFA which uses the phrase '...plant genetic resources for food and agriculture are a *common concern* of all countries' (emphasis added).

parties equally rather than any particular party or parties specifically'.²²⁴ In international agreements, such as the Montreal Protocol and the Kyoto Protocol, in connection with a breach of the obligations by one party 'its concern is not disputes between two (or a small number of) parties, but rather disputes pitting a single party against the other parties as a group'.²²⁵ Therefore, the NCP triggering channels are designed to serve this purpose. Fitzmaurice and Redgwell have rightly pointed out that a 'NCP is a multilateral and collective procedure' and that a NCP 'is more consistent with the nature of environmental treaty obligations, with the forum of the IC reflecting this collective character and possessing 'an *erga omnes* aspect'.²²⁶

3.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: In deciding the question of non-compliance involving technical issues, the qualifications of the members of the CC are of the utmost importance for assessing its suitability to fulfill this function. When considering the qualifications of those members of CCs who have to deal with the multi-dimensional character of the issue of non-compliance, what can be seen is that some NCPs set out the qualifications of members of CCs which require them to be persons who are competent in scientific, technical, socio-economic, legal or other fields.²²⁷ Some NCPs, such as the NCP of the Barcelona Convention, clearly provide that in the election of the members of the Committee a balance of scientific, legal and technical expertise needs to be achieved.²²⁸ However, not all NCPs use personal expertise as a basis for the selection of the members of CCs but also base the composition of members of CCs on the principle of equitable geographical

²²⁴ Robin Churchill and Geir Ulfstein, 'Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law' (2000) 94 AJIL 623, 644.

²²⁵ Thomas Gehring, 'International Environmental Law Regimes: Dynamic Sectoral Legal Systems' (1990) 1 YIEL 35, 51.

²²⁶ Malgosia Fitzmaurice and Catherine Redgwell, 'Environmental Non-Compliance Procedures and International Law' (2000) 31 Netherlands Ybk Intl L 35, 50; See also Antonio Cardesa-Salzmán, 'Constitutionalising Secondary Rules in Global Environmental Regimes: Non-Compliance Procedures and the Enforcement of Multilateral Environmental Agreements' (2012) 24 JEL 103, 115; Francesca Romanin Jacur, 'Triggering Non-Compliance Procedures' in Tullio Treves and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C Asser Press 2009) 375.

²²⁷ For example, Para. 3.2 of Annex 7 to the London NCP; Para. 6 of the Kyoto NCP; Para. 2 of the Aarhus NCP; Para.5 of the Water and Health NCP; Para.3 of the Cartagena Protocol NCP; Para.3 of the ITPGRFA NCP; Para. 3 of the Annex to decision RC-3/4, Draft text of the procedures and mechanisms on compliance with the Rotterdam Convention.

²²⁸ Para. 11 of the Barcelona NCP.

representation, a balance between developed and developing countries, and gender balance.²²⁹

NPCs may acquire information with regard to non-compliance from different sources such as information given by experts. Some technical questions may be handled by specialised bodies which work collaboratively with the CC. By way of illustration, it is worthwhile to consider the sources of information which both the branches (EB and the Facilitative Branch (FB)) which were established under the Kyoto Protocol use in deciding the question of implementation. According to the procedures and mechanisms relating to compliance under the Kyoto Protocol, each branch can base its deliberations on any relevant information provided by a wide variety of sources (apart from the information given by a party that has submitted a question of implementation with respect to another party) such as those from the reports of expert review teams, reports of COPs, the subsidiary bodies under the Convention and the Protocol, and the other branch.²³⁰ In addition, each branch may seek expert advice.²³¹ Unlike the ICJ, which is reluctant to seek advice from experts publicly when it is faced with complex technical questions in a dispute, it appears that the EB has no hesitation in resorting to experts for advice. It once even accepted explicitly that ‘the highly technical nature of the questions of implementation...requires the enforcement branch to seek assistance from experts. Advice from experts will facilitate the branch’s further understanding of the questions of implementation...’²³²

Some CCs work in collaboration with other technical treaty bodies so that the CCs can seek expert advice from the internal organs established under particular MEAs. Among those scientific and technical bodies are, for example, the Expert Review Team of the Kyoto Protocol, the Biosafety Clearing House Mechanism of the Cartagena Protocol²³³ and the Cooperative Programme for the Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe (EMEP) of the LRTAP Convention.²³⁴ It can be concluded that scientific and other questions will be appropriately addressed by NPCs.

²²⁹ See the POPs NCP; the Kyoto Protocol NCP; the Basel NCP and the Rotterdam NCP.

²³⁰ Section VIII, para. 3 (a)-(e) of the Kyoto NCP.

²³¹ Ibid, Section VIII, para. 5. See also Rule 21 of Decision 4/CMP.2.

²³² EB, Decision on Expert Advice, CC-2012-1-4/Slovakia/EB, 27 June 2012, para. 8.

²³³ See <<https://bch.cbd.int>> accessed 12 November 2014. It can submit information to the Compliance Committee in cases where the NCP has been initiated.

²³⁴ See <<http://www.emep.int>> accessed 12 November 2014.

Questions relating to societal choice: Where non-compliance leads to a dispute, the question arises as to whether a NCP is limited to establishing whether or not there has been non-compliance or whether it may consider the social and economic issues that may lie behind a case of non-compliance.

It should be observed that a CC usually has a duty not only to determine the actions or omissions of a State that is alleged to have breached its obligations but also to identify the causes of such non-compliance. For example, the Basel NCP clearly provides that the Committee shall consider any submission that is made to it in relation to a non-compliance issue ‘with a view to determining *the facts and root causes* of the matter of concern and assist in its resolution’.²³⁵ In the Kyoto Protocol, in a case where the Enforcement Branch (EB) of the Kyoto NCP has determined that a Party is not in compliance with its obligations, it shall take into account *the cause, type, degree and frequency of the non-compliance* of that party when making a declaration of non-compliance.²³⁶ Most, if not all, NCPs require the CC to find out the root causes of non-compliance in order to assist non-complying parties to return to respecting their obligations. Diagnosing the real problem with regard to the difficulty in implementing the obligations of an MEA is a crucial way to facilitate compliance.

3.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

The identification of the facts giving rise to a dispute: It may be appropriate to start appraising the suitability of NCPs for identifying the source of a breach of an international environmental obligation by considering the processes through which NCPs acquire information in relation to non-compliance.

Do they have the investigatory powers to identify questions of fact that can eventually enable them to conclude that the defaulting State has actually been in breach of its obligations? The position varies from one NCP to another but they all have some investigatory powers, as the following examples show.

The EB under the Kyoto NCP has a very complex system for identifying the sources of any breach of an international obligation set out in the Kyoto Protocol. The EB has the duty to identify whether parties alleged to be in non-compliance have observed the followings obligations: (1) their assigned commitments to limit and

²³⁵ Para. 9 (b) of the Basel NCP.

²³⁶ Section XV, para.1 of the Kyoto NCP.

reduce emissions (2) issues concerning methodology and the communication of information (inventories, reports) (3) eligibility criteria for flexibility mechanisms. None of these obligations can easily be examined without the complicated systems created under the Kyoto NCP. These include the information gathering process, through the registry techniques and the reporting system, and forms of information processing such as checks, compilation and communication.²³⁷

The CC of the Aarhus Convention has several processes for gathering information in order to enable it to reach a decision on cases of non-compliance. The means of gathering information can be categorised into three groups, namely 1) easily accessible and no-cost or low-cost means of obtaining information 2) obtaining information by contacting external sources 3) costly and more complicated means.²³⁸ For the first group, the information may come from several sources, such as international organizations that are active in the relevant field, reports from the Parties, Committee members, the literature and the Internet.²³⁹ As for the second group, the information may be provided by national and international experts from governments, academia, the private sector and non-governmental organizations.²⁴⁰ The last group is concerned with invitations of experts to meetings of the Committee and visits by Committee members and/or the secretariat to carry out on-the-spot information gathering and appraisals.²⁴¹ There are various ways in which the CC may choose to determine a breach of international obligations depending on the complexity of the cases which are brought before it. What is obvious is that the CC plays an active role in ascertaining the facts rather than relying solely on single sources of information. Considering the information gathering process, what can be concluded is that the CC actually has, to some extent, various investigatory powers. This conclusion can be confirmed by the fact that, in certain circumstances, the CC, with the consent of any of the parties concerned, is empowered to perform a fact-finding function or on-the-spot information gathering. This kind of acquisition of information is conducted through the visits of experts with a view to establishing the

²³⁷ Sandrine Maljean-Dubois, 'An Outlook for the Non-Compliance Mechanisms of the Kyoto Protocol on Climate Change', available at

<<http://amsterdamlawforum.org/article/view/133/255#sdendnote4sym>> accessed 11 November 2014.

²³⁸ UNECE, *Guidance Document on the Aarhus Convention Compliance Mechanism*, 24, available at <http://www.unece.org/fileadmin/DAM/env/pp/compliance/CC_GuidanceDocument.pdf> accessed 11 November 2014, 24.

²³⁹ Ibid, 24.

²⁴⁰ Ibid, 24.

²⁴¹ Ibid, 24.

facts and assessing the situation of alleged non-compliance in those cases where, for instance, the situation of alleged non-compliance is and continues to be serious, and the CC lacks essential information or else the case presents serious uncertainties.²⁴²

Another interesting point concerns those cases where the sources of the breach cannot be easily established. This raises the question of how NCPs deal with this situation. This point can be made by reference to the provision which empowers a CC to accept a submission of a submitting party concerning non-compliance. For example, the EB of the Kyoto NCP has to undertake a preliminary examination of questions of implementation to ensure that the question before it is supported by sufficient information or that it is not *de minimis* or ill-founded.²⁴³ This means that it can reject a *de minimis* or ill-founded submission. Reading through this provision, three words need to be interpreted: ‘sufficient’, ‘*de minimis*’ and ‘ill-founded’. What is the benchmark for appraising the quality of a submission as being insufficient or that the submission can be considered to be well-founded? No specific standard can be found in the practices of the CC. However, it is possible that if a submitting party or a treaty institution cannot establish a link of causality by supporting its submission with adequate information, then the submission is inadmissible. This kind of provision appears in almost all NCPs and it may create some problems within some MEAs, such as the London Dumping Protocol. There may be situations where there is insufficient information to substantiate an allegation that a particular State has disposed of wastes or other prohibited matters on the high seas. In this event, the Compliance Group will reject the submission on the basis that it was an unidentifiable source so that the submission could be viewed as an ill-founded allegation. It can be concluded that if the sources of a breach are not clearly identifiable then NCPs may not be the right forum to bring up the issue of non-compliance.

The determination of a breach of an international obligation: Once the factual questions have been established and the source of harm could be identified, the question is that: Are NCPs suitable for determining the legal question whether such facts represent a breach of an international obligation? Normally, a CC’s task is to examine the facts in the light of the primary rules set out in particular MEAs in order to determine whether there has actually been non-compliance. If they find that the

²⁴² Ibid, 25.

²⁴³ Section VII, para. 2 of the Kyoto NCP. See the similar provision, for example, para.18 of the Rotterdam NCP and para. 21 of the Barcelona NCP.

State fails to meet the standard provided, a CC will then declare that State to be in non-compliance. Terminologically, it is unclear how that the word ‘breach’ differs from ‘non-compliance’.²⁴⁴ What is clear is that the declarations of non-compliance made by CCs involve a process of the application of law that is akin to the judicial activity of courts and tribunals, although these mechanisms differ radically. Thus, NCPs are a suitable forum for addressing legal issues.

3.4 Suitability for Quantifying Damages

There are three important questions which need to be asked in relation to the issue of the suitability of NCPs for quantifying damages: Is it the role for CCs to award compensation? Is a CC empowered to award compensation? And if the answers to these questions is ‘yes’, how suitable is a CC for determining the amount of compensation?

Awarding compensation to an injured State or States²⁴⁵ for a breach of international environmental obligations is not a function of NCPs at all, since the most important objective of the creation of NCPs is to maintain the stability and solidarity of particular MEAs and to improve compliance by ensuring that the defaulting State can return to full observance of its obligations again, rather than to provide reparation after the events have occurred and ‘not necessarily to incriminate for non-compliance’.²⁴⁶ Fitzmaurice and Redgwell have clearly stated that ‘the primary objective of NCPs is to ensure a return to compliance with treaty obligations rather than to require reparation by the defaulting state for the harm caused to another state or states for breach of international obligations.’²⁴⁷ Nonetheless, it could be argued that if one were to examine the situation in terms of the law on State responsibility, the remedy that a CC would seek would be restitution, i.e. returning the non-complying State to a state of full compliance.

Quantifying damages is based on the responsibility-based paradigm which is contrary to the nature of NCPs, since NCPs were created to overcome the difficulties in applying the concept of state responsibility in the context of international environmental problems. As Merrills has pointed out, ‘traditional law of state

²⁴⁴ See the discussion of this matter in Martti Koskeniemi, ‘Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol’ (1992) 3 YIEL 123, 145-146; Pierre-Marie Dupuy and Jorge E. Viñuales, *International Environmental Law* (CUP 2015) 44.

²⁴⁵ Also, it is not the function of a CC to consider whether a State has been injured. In many/most MEAs the injury is to the parties generally or to the international community as a whole.

²⁴⁶ Fitzmaurice and Redgwell (n 226) 39. See also Para. 4.1 (3) and Para 4.2 of the London NCP.

²⁴⁷ Ibid, 56.

responsibility, though necessarily the basis of treaty obligations, is at the same time a crude and unsatisfactory instrument for encouraging performance.’²⁴⁸ Therefore, NCPs are not a suitable mechanism if the affected party would like to be awarded compensation for environmental damage, since the nature of NCPs is not consistent with a responsibility-based concept.

3.5 Suitability for Interpreting and Applying Procedural Obligations

Generally, the possible consequences of non-compliance are not concerned with procedural measures, such as the recommendation of the CC requiring the defaulting State to carry out an EIA, to guarantee rights of access to information or to guarantee access to justice in environmental matters with a view to bringing about full compliance with the treaty concerned. But in NCPs it seems that CCs are only faced with having to consider such obligations where they are part of the substance of the treaty.

There are two NCPs that are concerned directly with procedural obligations, namely the Aarhus Convention NCP and the Espoo Convention NCP. The Aarhus Convention takes a rights-based approach in protecting the rights of individuals in environmental matters, can approach containing three pillars: 1) access to information, 2) public participation and 3) access to justice. One case concerned the failure of Ukraine to observe its obligations since public participation was not provided.²⁴⁹ The soft measure taken by the Implementation Committee was to request Ukraine to improve its legislation and practice so as to make them consistent with its international obligations.²⁵⁰ The Espoo Convention deals with the obligations of States concerning EIA, which entails two major obligations: 1) the obligations of the party of origin where the proposed activity will take place to notify the affected party and to allow full participation of the affected parties in the domestic EIA procedures²⁵¹ 2) the obligation of the party of origin to give the affected party notice of the proposed activity and the EIA documentation.²⁵²

²⁴⁸ Merrills (n 34) 79.

²⁴⁹ Submission ACCC/S/2004/01 *Romania v. Ukraine* (Finding and Recommendation) [14 March 2005] ECE/MP.PP/C.1/2005/2/Add.3, para. 38-40.

²⁵⁰ Ibid, para. 41.

²⁵¹ Arts. 3 and 5.

²⁵² Arts. 2.2, 2.6, 3.1, 3.8 and 4.2.

It can be concluded that NCPs are not generally designed to deal with issues of the interpretation and application of procedural obligations, but instead they focus on specific substantive obligations within particular MEAs.

4. AN APPRAISAL OF THE SUITABILITY OF RFMO PANELS IN SETTLING INTERNATIONAL ENVIRONMENTAL DISPUTES

Before analysing the suitability of review panels, it should be noted from the outset that this applies to a very narrow category of environmental dispute, namely disputes relating to the use of the objection procedure in those RFMOs that provide a review mechanism, and that the discussion of suitability is solely in the context of this narrow category of dispute.

4.1 Suitability for Settling Disputes that may be Bilateral or Multilateral in Character

The design of the review procedures can be said to be a bilateral structure, like that of courts, tribunals, and arbitration, in which one party submits its arguments to a review panel and the other party submits its counter-arguments.²⁵³ There is no reason to believe that a review panel is not a suitable forum for settling a bilateral dispute.

For multilateral disputes, the RFMO panels have procedures that are perfectly suited for settling a dispute in which several States may also have interests in objections to the conservation and management measures of the RFMO. The RFMO conventions recognise that there will be situations where more than two parties in a dispute are seeking a review of the decisions of a commission.²⁵⁴ There is also a provision that allows other States to intervene in panel proceedings, which is more like intervention in judicial proceedings. In section 6 to Annex II of the SPRFMO Convention, it clearly provides that ‘*any member of the Commission* may submit a memorandum to the Review Panel concerning the objection under review and the Panel shall allow *any such member of the Commission* full opportunity to be heard’ and this opportunity was widely used in the one case to date.²⁵⁵ A similar provision can also be found in the NAFO Convention, the NEAFC Convention and the WCPF

²⁵³ Art. 17 (2) (a) of the SPRFMO Convention, Art. 12 (2) (a) of the NEAFC Convention, Art. XIV (7) of the NAFO Convention, Art. 20 (6) of the WCPF Convention and Art. 23 (1) (f) of the SEAFO Convention.

²⁵⁴ Chapter 8 (42) (b) of the Rules of Procedure of the NEAFC; Art 17 (5) (c) (d) of the SPRFMO Convention; Para.4 (e) of Annex II to the NAFO Convention; Para. 2 (c) of Annex II to the WCPF Convention.

²⁵⁵ Emphasis added; see Annex II of the SPRFMO Convention.

Convention where they grant the right to any Contracting Party which is not a Party to the dispute to make written and oral submissions to the *ad hoc* panel.²⁵⁶ There is also a fascinating provision in the NAFO Convention that allows another party, which is not originally a party to a dispute but who later wishes to become a party to a dispute, to participate in the process of establishing an *ad hoc* panel and to join the proceedings, unless the original Parties to the dispute disagree.²⁵⁷ Thus, this kind of procedure is unrestricted since member States, apart from those that object to the decision, can join the proceedings without showing that they are injured or have been specifically affected in the sense that is usually required to become a party to a dispute. As Schiffman notes, in the context of the SPRFMO Convention, ‘This attempt by the drafters of the SPRFMO Convention to subject objections to a form of multilateral review is innovative and reflects a trend in this direction by newer RFMOs’.²⁵⁸

Such procedures are suitable for high seas fisheries disputes, which by their nature are inherently multilateral in character. That is to say, conservation and management measures adopted by a commission of particular RFMOs nearly always include a catch management measure in the form of a total allowable catch as one of the conservation measures which, in turn, is divided into quotas and then is allocated to different State members of such RFMOs. If a member or members present an objection to a commission’s decision in this matter, other members’ interests may be affected in the sense that such objections may affect the total catch or the question of whether the TAC will be exceeded.

Moreover, the nature of the procedure is also multilateral.²⁵⁹ Taking the SPRFMO as an example, an objection to a measure automatically triggers the establishment of a review panel, it does not depend on the initiation of proceedings by the Commission or by another member. It is true that the Commission plays a crucial

²⁵⁶ Para. 5 of Annex II to the NAFO Convention; Para. 10 of Annex 1 to the NEAFC Rules Concerning the *Ad Hoc* Panel on Dispute Settlement; Para. 6 of Annex II to the WCPF Convention. However, the SEAFO Convention is the only convention that does not provide any provision allowing the other States parties to participate.

²⁵⁷ Para. 3 of Annex II to the NAFO Convention.

²⁵⁸ Howard S. Schiffman, ‘The South Pacific Regional Fisheries Management Organization (SPRFMO): An Improved Model of Decision-Making for Fisheries Conservation?’ (2013) 3 J Environ Stud Sci 209, 212.

²⁵⁹ Rayfuse views that this was a ‘dispute between Russia and the other members of the South Pacific RFMO (SPRFMO)’ Rosemary Rayfuse, ‘Regional Fisheries Management Organisations and their Efforts and Measure to Regulate Fishing Activities’ in Hans-Joachim Koch and others (eds), *Legal Regimes for Environmental Protection: Governance for Climate Change and Ocean Resources* (Brill Nijhoff 2015)166.

role in determining the composition of the panel, but when it does so it is acting on behalf of the members generally. Furthermore, while Article 17 of the SPRFMO Convention makes provision for written submissions by the members of the commission, it does not explicitly provide for submissions by the commission itself.²⁶⁰ Thus, a dispute before a SPRMO panel is a true multilateral dispute.

4.2 Suitability for Settling Disputes of a Multi-Dimensional Character

Questions relating to scientific and technical issues: Conservation and management measures are involved with technical matters. As the ICJ noted in the *Fisheries Jurisdiction* case: ‘According to international law, in order for a measure to be characterized as a “conservation and management measure”, it is sufficient that its purpose is to conserve and manage living resources and that, to this end, it satisfies various *technical requirements*.’²⁶¹ The Court then concluded that ‘International law thus characterizes “conservation and management measures” by reference to *factual and scientific criteria*.’²⁶²

A review panel can serve the purpose of disentangling the complexity of technical and scientific questions because of its composition in which not only lawyers are members but also scientists and technical experts. For instance, the SPRFMO review panel has to be composed of ‘experts whose competence in the legal, scientific or technical aspects of fisheries’²⁶³ which shall be appointed from ‘the list of experts in the field of fisheries drawn up and maintained by the Food and Agriculture Organization of the United Nations (FAO) pursuant to Annex VIII, article 2, of UNCLOS or a similar list maintained by the Executive Director’.²⁶⁴ In the *Trachurus murphyi* case, the chairperson of the SPRFMO Commission appointed Sra. Valeria Carvajal as one of the members of the panel who had special expertise in the field of fishing engineering. The other two members were two international lawyers: Professor Kamil A. Bekyashev, who was appointed by Russia, and Professor Bernard H. Oxman, who served as the third member and as the Chairman appointed by both the parties. However, it should be noted that in this case, the panel failed to establish

²⁶⁰ Art. 17 of the SPRFMO provides that ‘Any member of the Commission may present to the Executive Secretary an objection to a decision within 60 days of the date of notification “the objection period”’.

²⁶¹ *Fisheries Jurisdiction* case, para. 70 (emphasis added).

²⁶² Ibid, para. 70 (emphasis added).

²⁶³ Para.1 (a) of Annex II to SPRFMO Convention; the same qualifications also appear in para.1 of Annex II of the Amendment to the NAFO Convention.

²⁶⁴ See also para. 2 (a) of Annex II to the WCPF Convention.

whether the La Fayette had actually caught any fish, since it was claimed to be a factory mothership, not a trawler that was actively fishing *Trachurus* species in either 2009 or 2010. It is not clear why the panel failed to do so. The reason may be because the panel lacked the necessary expertise, or because of a lack of time, since the panel is obliged to provide its findings within 45 days of its constitution so that it may not have enough time to consider this matter.

Seeking advice from experts is possible for a panel that is constituted under the NAFO Convention. It may seek information and technical advice from any person or body that it deems appropriate upon receiving the consent of the parties, although the panelists may be selected from any person who has qualifications in the legal, scientific or technical aspects of fisheries.²⁶⁵

It can be concluded that RFMO review panel procedures require qualified persons who can deal with scientific and technical issues and therefore such panels are suitable for addressing technical questions.

Questions relating to societal choice: As far as the societal dimension of such disputes is concerned, it seems at first sight that a panel may not take non-legal factors into account when making a recommendation since there are no explicit provisions allowing it to do so. This is because, generally, a panel is mandated to apply the relevant provisions of certain conventions, for example UNCLOS, the Fish Stocks Agreement,²⁶⁶ the convention establishing the RFMO concerned, and any other rules of international law that are not incompatible with the RFMO conventions.²⁶⁷

However, some of the RFMO conventions leave some room for non-legal matters. The NAFO Convention also adds ‘generally accepted standards for the conservation and management of living resources’ as one of the applicable rules to be applied by an *ad hoc* panel.²⁶⁸ It is interesting to consider the question what are the generally accepted standards for the conservation and management of living resources: Do they include non-legal guidelines or non-legal factors? McDorman expresses doubts about this type of clause when he says that ‘it is unclear whether “generally accepted standards” implies customary law or whether, *and more likely*, it

²⁶⁵ Para.6 of Annex II to the NAFO Convention and para.11 of the Annex I to the NEAFC.

²⁶⁶ See para. 10 (f) (i) and (j) of Annex II to the SFRFMO Convention and para. 42 (f) of Chapter 8 of the Rules of Procedure of the NEAFC Convention.

²⁶⁷ See also the Rules of Procedure of the NEAFC Convention and Art. XV (11) of the NAFO Convention.

²⁶⁸ Art. XV (11) of the NAFO Convention.

allows a court or tribunal to examine appropriate *resource management practices that are not of a law-creative quality*.²⁶⁹ Some standards provide that the ecosystem-based approach may be included as an accepted standard.²⁷⁰

It should be noted, however, that in the SPRFMO Convention the two terms, namely ‘findings’ and ‘recommendations’, are clearly distinguished from one another. Whereas the review panel has to restrict itself to the legal text before deciding the case and issuing its findings, the recommendations may not necessarily be proposed as a result of legal interpretation. It could, arguably, detach itself from the law and allows societal factors, such as, to borrow McDorman’s words, those ‘resource management practices that are not of a law-creative quality’ to play a role in resolving a dispute. The other Convention which uses the terms ‘findings’ and ‘recommendations’ is the WCPF Convention.²⁷¹

In addition, although the RFMO conventions require a review panel to apply UNCLOS, it can nonetheless make a recommendation that takes into consideration economic and social factors, since Article 119 of UNCLOS acknowledges that conservation measures for living resources on the high seas shall also be adopted in a way that will produce the maximum sustainable yield as qualified by the relevant environmental and economic factors, as well as the special requirements of developing States.²⁷² Thus, a review panel may have broad discretion to select other dimensions of a dispute rather than just the law when providing its recommendations relating to conservation and management measures.

4.3 Suitability for Identifying the Source of the Alleged Breach of an International Environmental Obligation

A panel is designed to review the consistency of a decision of a RFMO commission with the principle of non-discrimination and various treaties, including the constituent of the RFMO concerned, UNCLOS and the Fish Stocks Agreement and the acceptability of the objecting State’s proposed alternative measures. If a panel finds that a decision that has been adopted is inconsistent with such principles or treaties, there is a breach of the environmental obligations or a breach of the obligation not to

²⁶⁹ Ted L. McDorman, ‘The Dispute Settlement Regime of the Straddling and Highly Migratory Fish Stocks Convention’ (1997) 35 Canadian Ybk Intl L 57, 72 (emphasis added).

²⁷⁰ Daniela Diz Pereira Pinto, *Fisheries Management in Areas beyond National Jurisdiction: The Impact of Ecosystem Based Law-Making* (Martinus Nijhoff Publishers 2013) 97.

²⁷¹ Para. 10 of Annex II to WCPF Convention.

²⁷² Art. 119 (1) (a) of UNCLOS.

discriminate contained therein. Therefore, a panel has the competence to perform this task. However, the question may be asked: Does it have any investigatory power to ascertain the fact that leads to such a breach?

In identifying the sources of a dispute, there are different techniques using different mechanisms that must be applied before rendering a judgment or proposing any recommendations. RFMO panels take the traditional approach of acquiring information by relying on the submissions of the parties. In the *Trachurus murphyi* case, the review panel did not play any active role in finding the facts which they would use as a basis for deciding the case. The information that the review panel relied on came solely from the written submissions and oral presentations of the parties to the dispute. This is akin to the technique which international courts and arbitrations use in deciding a case.

It should be noted, however, that if a dispute is about question of whether an RFMO measure is consistent with the relevant treaties, this is purely a legal determination that would not seem to require any facts to be investigated.

4.4 Suitability for Quantifying Damages

The question in relation to this issue is that: is it the function of a panel to quantify damages? To answer this question, it is necessary to consider the constituent treaties that establish a panel. For example, the SPRFMO Convention elaborates what the findings and recommendations shall be. They shall, according to paragraph 10 of Annex II, deal with 1) whether the decision of the Commission can be considered as a form of discrimination in form or in fact against the objecting member or members of the Commission; 2) whether the decision of the Commission is inconsistent with the SPRFMO Convention, UNCLOS or the Fish Stocks Agreement; 3) whether the alternative measures presented by the objecting member or members of the Commission have an equivalent effect to the decision that has been objected to and 4) if the alternative measures do not have an equivalent effect, what new measures should it recommend?²⁷³ A similar provision can also be found in the other conventions, such as the NAFO Convention, in which an *ad hoc* panel's recommendations are limited to the question of the compatibility of the objection with

²⁷³ See para. 10 of the Annex II to the SPRFMO Convention.

the grounds provided and the question of whether or not the decision of the Commission shall be modified, rescinded or maintained.²⁷⁴

Thus, it is evident that it is not a panel's function to award compensation for environmental damage, since the primary function of a panel is to review a decision adopted by a certain RFMO commission rather than to deal with an assessment of financial loss as a result of environmental damage and lost fishing opportunities. In addition, although a panel can propose recommendations, it is most unlikely that a panel would award compensation because its function is to deal with the appropriateness of conservation and management measures and to suggest suitable measures if it deems that the original measures need to be amended. Thus, a panel is not designed to allow the panelists to engage in the role of awarding damages.

4.5 Suitability for Interpreting and Applying Procedural Obligations

As has been mentioned in each of the sections of this chapter, the interpretation and application of procedural obligations are matters of law. Thus, a panel would have no difficulty in performing this task were it required to do so if a panel consists primarily or entirely of lawyers. The circumstances in which it might have to apply procedural obligations would seem to be limited, though not entirely non-existent. For example, since the function of a panel is to assess the compatibility of RFMO measures with various treaties, it would have to interpret or apply any procedural obligations found in those treaties.

By way of illustration, as far as the obligation to carry out an EIA is concerned, there might be a dispute with regard to the interpretation or application of a decision adopted by a RFMO concerning bottom fishing activities which requires that the vessels of its members shall not engage in bottom fishing until assessments have been carried out to ensure that such fishing would not have any significant adverse impacts on vulnerable marine ecosystems (or permits vessels to carry out bottom fishing without having carried out an EIA).²⁷⁵ Some members of the RFMO might object to this decision on the grounds that that it was, for example, inconsistent with Article 206 of UNCLOS which provides that States shall assess the potential

²⁷⁴ See also Art. 20 (6) and (8) of the WCPF Convention and para. 10 of Annex II to the WCPF Convention.

²⁷⁵ Conducting an EIA before engaging in bottom fishing activities has been an issue which RFMOs have been asked by the General Assembly to take measures to implement in its resolutions but they have still not been fully implemented; see UNGA Res 61/105 (6 March 2007) UN Doc A/RES/61/105 para. 83 (a)-(d); UNGA Res 64/72 (19 March 2010) UN Doc A/RES/64/72 paras. 119 (a)-(d), 120, 122 and 123.

effects of such activities on the marine environment in cases where planned activities under State jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment. This would create the need for a panel to deal with this issue. In practice, the NEAFC Commission has adopted and amended recommendations concerning bottom fishing activities since 2008 and no objections have yet been presented.²⁷⁶

Nevertheless, the possibility of setting up a panel to interpret and apply such procedural obligations does not necessarily mean that its findings and recommendations will contain in an operative part which orders the objecting members and the commission to perform some kind of procedural obligation, such as providing a recommendation asking the parties to set up a group of experts to conduct an EIA, to perform general duties of co-operation and to fulfill their obligations concerning prior notification, consultation and negotiation. Instead, a panel might only have to determine the scope of the obligations contained in Article 206 of UNCLOS and the compatibility of the RFMO measures with them. The reason is that a panel's discretion is constrained by the constituent treaties establishing the panel. Rather than providing recommendations that a panel considers appropriate to settle a dispute, its recommendations must be confined to its role in the RFMO in question. The most that a review panel might do is to suggest a new set of EIA rules to amend or replace the old ones that it sees as inappropriate.

CONCLUSIONS

This chapter has considered the suitability of various dispute settlement mechanisms for settling international environmental disputes. The suitability of each of these means has been analysed on the basis that international environmental disputes have five special characteristics that distinguish them from the other kinds of disputes that arise international law.

Characteristic 1: Judicial and non-judicial mechanisms can be used perfectly well to settle bilateral international environmental disputes. Multilateral disputes do not fit neatly into the rules and procedures of the international courts. However, the

²⁷⁶ See Recommendation XVI: 2008; Recommendation XIII: 2009; Recommendation XI: 2010; Recommendation XV: 2011; Recommendation XIII: 2013; see the consolidated text of all NEAFC recommendations on the regulating of bottom fishing, available at <<http://www.neafc.org/system/files/Consolidated%20bottom%20regulations%20amended%20by%20recommendation%2012%202013.pdf>> accessed 28 November 2014.

jurisprudence of the ICJ has shown an inclination to allow cases involving the interpretation and application of treaties which have an *erga omnes partes* character to be litigated in the ICJ although, formally, they are usually bilateral when litigated, as in the *Whaling* case. For the purpose of arbitration, there are the PCA's Environmental Rules for Arbitration that allow for multi-party environmental disputes. Non-judicial mechanisms are the most flexible means for the settlement of multilateral international environmental disputes since their rules and procedures are not fixed beforehand and they can be adapted according to each type of international environmental dispute. There is a set of model rules, i.e. the PCA's Environmental Rules for Conciliation which States can choose to adopt as the framework for the conciliation process. Non-judicial means can employ various techniques to facilitate the settlement of multi-party international environmental disputes. For *erga omnes (partes)* environmental claims, a third party may offer its help to mediate, conciliate or investigate the dispute. It depends of the willingness of all the parties whether or not to accept such an offer unless there is a provision that allows any State parties to a particular treaty to initiate mediation, conciliation or inquiry unilaterally. NCPs and RFMO panels are suitable for settling multilateral environmental disputes since their nature is not confined to a bilateral paradigm but their process of settlement is designed to be able to deal with multi-party disputes or *erga omnes partes* environmental claims.

Characteristic 2: With regard to the multi-dimensional character of international environmental disputes, the suitability of each means of dispute settlement in dealing with scientific and societal issues has been analysed in this chapter. International judicial organs may not be suitable for dealing with scientific questions since they may not possess the necessary expertise, although they can appoint experts to provide or assess technical information, but in practice they appear to be reluctant to do so. In addition, societal factors may not be considered by international courts as issues that are relevant to the case since their focus is on the legal questions. Arbitration is more flexible than international courts in the sense that the parties still retain their ultimate control over the procedures, so they can select non-lawyers with the relevant expertise to act as arbitrators or they can mandate the arbitral tribunal to make use of technical consultants. Societal factors may be considered by arbitral tribunals if the parties wish them to be taken into account when deciding a case. Non-judicial means are also suitable for settling environmental

disputes that involve societal factors that are extraneous to legal questions or complex scientific questions. This is because their recommendations can take into account other factors which are considered to be the root causes of the conflict between the parties. For the purpose of addressing non-legal questions, non-judicial mechanisms are more flexible in terms of selecting persons with the required expertise who will serve as mediators, conciliators or inquiry commissions. NCPs and RFMO panels can deal relatively well with non-legal questions, since the members of a compliance committee or panel are not necessarily lawyers.

Characteristic 3: There are two distinct aspects of the identification of the sources of breaches of international environmental obligations. For the first aspect (the identification of the facts that give rise to a dispute), conciliation and inquiry are good for this factual issue. Non-judicial means can serve to facilitate this function very well since they can use diplomatic techniques to ascertain the sources of a breach, especially through inquiry, which in its very design is concerned directly with this function. NCPs have an investigatory function in ascertaining the sources of disputes with a view to improving compliance with specific environmental treaty regimes. The suitability of international courts is not promising because they do not have the appropriate capacities to identify complex cases, such as those involving complex technical questions about the sources of a breach. Another reason is that they tend not to take on the inquisitorial power that is necessary to perform this function. This is also true for arbitration, but if the parties wish an arbitral tribunal to do this they can design the rules and procedures which will correspond to their desire. Also, RFMO panels are unsuitable for this purpose. For the second aspect (the determination of whether the facts represent a breach of an international obligation), diplomatic means are unsuitable for addressing the legal issues. On the contrary, judicial means and NCPs are suitable for determining a breach of an international environmental obligation.

Characteristic 4: International courts can award damages. Like international courts, arbitral tribunals can award compensation and can be quite flexible in the sense that the parties may mandate them to apply certain criteria for assessing damages which they see as useful to their case, such as those from the UNCC, the F4 Panel. Quantifying damages is not part of the function of non-judicial mechanisms. However, the parties may ask the commissioners to provide recommendations in this regard, probably not in the form of compensation but may be in the form of *ex gratia*

payment. Furthermore, with their flexibility in term of the rules and procedures they apply, various criteria in assessing damages can be employed. NCPs and RFMO panels are not designed to deal with the quantification of environmental damages. Rather, in the case of NCPs, they perform a recommendatory function in inducing the breaching States to comply with their obligations again and, in the case of RFMO panels, they propose appropriate measures for the parties to adopt with a view to strengthening their compliance with treaties.

Characteristic 5: With regard to the interpretation and application of procedural obligations, international courts and arbitral tribunals can perform this task very well, since these kinds of legal activities and procedural obligations are now not in a state of flux, so that they should have no difficulty in interpreting and applying them. Non-judicial means can also perform the function of interpretation and the application of procedural obligations very well, since their nature is diplomatic, a field in which soft-control measures, such as suggesting to the disputants that they perform particular procedural obligations, is a suitable solution to be adopted. However, NCPs are generally not suitable for this purpose, with the exception that in some cases they have to deal directly with the procedural obligations that are set out in particular treaties such as the Aarhus Convention and the Espoo Convention. As for RFMO panels, they may have a chance to become involved in the interpretation and application of procedural obligations when they have to deal with those conservation measures which have a procedural element.

To sum up, judicial means are suitable for deciding bilateral environmental disputes and interpreting and applying procedural obligations. They are not suitable for deciding cases involving multiple parties, multidimensional disputes, quantifying environmental damages or identifying the sources of a breach of environmental obligations, except for *ad hoc* arbitration, where parties can set up arbitral procedures which suit a specific characteristic of the environmental disputes at issue. Diplomatic means, NCPs and RFMO panels, are suitable for deciding bilateral and multilateral disputes, multidimensional disputes, identifying the sources of a breach (except for NCPs and RFMO panels). They are not suitable for awarding environmental damages and interpreting and applying procedural obligations (except for some NCPs, e.g. the Aarhus NCP, the Espoo NCP, the Basel NCP, or the Rotterdam NCP) but conciliation and mediation may do this if they were to be asked for by the parties.

Furthermore, apart from the nature of the disputes described above, whether a particular dispute settlement means is suitable for settling a particular environmental dispute depends also on two main factors: (1) the wishes of the parties and (2) the type of dispute.

(1) The wishes of the parties: As with any type of inter-State dispute, the suitability of any particular dispute settlement mechanism depends on what the parties want. Thus, the parties will choose diplomatic means if they want to retain control of the dispute, avoid the unpredictability, cost and time of litigation, are willing to compromise without necessarily basing the solution on the strictly legal position etc. Conversely, the parties will choose legal means if they want a legally binding outcome, based on the law and are not concerned about the cost and speed of litigation. Judicial means may also be attractive for weaker States in asymmetric power relationships.

(2) The type of dispute: NCPs and RFMO panels cannot be used for many kinds of environmental disputes and therefore they will be unsuitable for such disputes. Judicial means will also be unsuitable for environmental disputes in which there is no possibility for a court to have jurisdiction.

It would be worth making the point at the end of these conclusions, that the fact that a particular means may be suitable does not necessarily mean that it will be used in practice to any great extent. This seems to be the case with non-judicial means, as described in chapter 3. Other factors apart from suitability come into play in determining the choice of dispute settlement means by the parties to an environmental dispute. Such factors include effectiveness, and this is the issue that will be considering in the next chapter.

CHAPTER 5
ASSESSING THE EFFECTIVENESS OF DISPUTE SETTLEMENT
MECHANISMS IN SETTLING INTERNATIONAL
ENVIRONMENTAL DISPUTES

INTRODUCTION: RESEARCH QUESTIONS AND METHODOLOGICAL CLARIFICATION

In the last chapter, the question of the suitability of each mechanism in settling international environmental disputes was addressed. The purpose of this chapter is to evaluate the effectiveness of dispute settlement mechanisms, an issue that is distinct from the question of suitability. While suitability is largely concerned with the appropriateness of particular mechanisms by considering the special characteristics of international environmental disputes and the characteristics of each dispute settlement mechanism, effectiveness is about the measurement of the mechanism's ability to bring about intended outcomes.

There are two main research questions that need to be asked:

1. What are the criteria for evaluating the effectiveness of international dispute settlement mechanisms?
2. How far do the various means available for settling international environmental disputes discussed in chapter 3 meet such criteria?

In answering the first question, it is appropriate to establish methodological guidelines from the outset. One might begin with the definition of effectiveness: what does 'effectiveness' mean? According to the Oxford English Dictionary, the ordinary meaning of effectiveness is 'the degree to which something is successful in producing a desired result; success'.¹ However, there is no clear and coherent definition of effectiveness in international law.² There are vast bodies of studies relating to the theory of effectiveness that have attempted to offer criteria or indicators that would help to assess effectiveness in relation to particular subject matters. For example,

¹ Available at <<http://www.oxforddictionaries.com/definition/english/effectiveness>> accessed 24 March 2015.

² See Yuval Shany, *Assessing the Effectiveness of International Courts* (OUP 2014) 4. Chambers also notes that the term effectiveness 'is randomly used in legal discussion but rarely defined consistently in the world of public international law': see W. Bradnee Chambers, *Interlinkages and the Effectiveness of Multilateral Environmental Agreements* (UN University Press 2008) 97.

there are studies that attempt to measure the effectiveness of international environmental regime,³ the effectiveness of international environmental treaties⁴ and the effectiveness of international courts.⁵ Although there is a body of literature that has developed criteria of effectiveness, for instance, criteria for evaluating judicial effectiveness, such criteria have been criticised by other scholars for their lack of reliability and utility.⁶ Consequently, several attempts have been made to create different tools to measure effectiveness, claiming that these would help to fill the gap and offer a new approach to answering the question of effectiveness. What can be seen is that there are no agreed criteria of effectiveness in existence. This leads Gabriela Kütting to state that ‘Effectiveness means distinctly different things to different communities’.⁷ When one wants to evaluate effectiveness, certain criteria must be created according to the subject matter that one wants to appraise and the research questions that one asks.

What part 1 of this chapter seeks to do is to introduce criteria of effectiveness that can be used for evaluating four different dispute settlement mechanisms, including judicial and non-judicial means, NCPs and RFMO panels. Although criteria for assessing the effectiveness of judicial means have been developed by scholars, no attempt has yet been made to develop a set of criteria that suitable for all four of the means of dispute settlement considered in this thesis. It should be noted from the outset that the formulation of the theoretical foundations for the criteria for assessing effective dispute settlement cannot be selected from a single theory of effectiveness propounded by particular scholars. Rather, different theories will be selected by borrowing from the existing literature in various disciplines, for example, the social sciences, international relations and international law, and using these as guidelines for establishing the criteria that no one else has tried to develop before. This approach that Shany calls ‘intellectual borrowing’—which means borrowing similar conceptual

³ See, for example, Oran R. Young, ‘Effectiveness of International Environmental Regimes: Existing Knowledge, Cutting-Edge Themes, and Research Strategies’ (2011) 108 PNAS 19853, Carsten Helm and Detlef Sprinz, ‘Measuring the Effectiveness of International Environmental Regimes’ (2000) 44 JCR 630

⁴ W. Bradnee Chambers, ‘Towards an Improved Understanding of Legal Effectiveness of International Environmental Treaties’ (2004) 16 Geo Int’l Envtl L Rev 501.

⁵ Shany (n 2).

⁶ For example, Shany criticised the criteria proposed by Eric A. Posner and John C. Yoo, see *ibid*, 5; Eric A. Posner and John C. Yoo, ‘Judicial Independence in International Tribunals’ (2005) 93 Cal L Rev 1.

⁷ Gabriela Kütting, *Environment, Society and International Relations: Towards More Effective International Agreements* (Routledge 2000) 3.

frameworks from one or more sciences with a view to overcoming the methodological limits of the other sciences.⁸ The set of indicators of effectiveness developed in the present chapter are not intended as an exhaustive list and they will be evaluated only for their relevance to the investigation of the settlement of an international environmental dispute.

After establishing criteria for determining the effectiveness of dispute settlement mechanisms, parts two of this chapter will apply these criteria to the four different dispute settlement mechanisms mentioned above by discussing both in general terms and using case studies as examples. Thus, the second research question will then be answered in this part, based upon the experiences of the dispute settlement systems in judicial and non-judicial contexts.

Due to the fact that, in this chapter, the same set of criteria of effectiveness will be used to assess both judicial and non-judicial means of dispute settlement, there is a terminological issue that needs to be clarified. The phrase *decision makers* as used below includes judges, arbitrators, mediators, conciliators, commissions of inquiry, non-compliance committees and RFMO panels. Likewise, when using the word *decisions* this should be understood to include judgments of international courts, arbitral awards, recommendations of mediators, conciliators and RFMO panels, findings of commissions of inquiry and decisions of non-compliance committees.

1. DETERMINING THE CRITERIA OF EFFECTIVE MECHANISMS FOR THE SETTLEMENT OF INTERNATIONAL ENVIRONMENTAL DISPUTES

1.1 Input Criteria

1.1.1 Procedural Indicators

One way of determining effectiveness, as suggested by scholars, is to consider the process of dispute settlement. The procedural indicators involve the ways in which the processes of dispute settlement are designed. Effectiveness can be measured against a process that allows all the relevant potential parties to participate in the process.⁹ The question that may then arise is whether the dispute is bilateral or multilateral in scope. It is clear that bilateral international environmental disputes may not create any

⁸ Shany (n 2) 5.

⁹ Ibid, 61.

difficulty in determining which actors can participate in the process. On the contrary, in a case where the environmental problems themselves have had a widespread effect on a number of States, the participatory scope of the dispute settlement process should be commensurable with the scope of such problems. In this case, the focus is on the participation of the States those are genuinely parties to the dispute in the strict sense. The question is whether there is any mechanism that is open to wider participation, providing a way for several parties to file a complaint. An inclusive and open process that allows all parties to participate in the process in a competent manner in multilateral international environmental disputes would increase the chance of effectiveness in settling a dispute.¹⁰ To sum up, effectiveness is evaluated by considering whether all potential parties can participate in the process of dispute settlement

1.1.2 Structural Indicator

Structural indicator will consider the structural arrangements of dispute settlement mechanisms. Effectiveness may be evaluated by looking at the qualifications of decision-makers.¹¹ Guzman is of the opinion that ‘a better judge produces higher quality decisions — decisions that are more likely to reach accurate conclusions with respect to the facts and the law.’¹² Settling an international environmental dispute may require special expertise in the field of international environmental law and also understanding of technical issues to produce reasonable and high quality outcomes. Therefore, effectiveness is tested by considering whether or not the particular mechanisms consist of proficient decision makers who have special knowledge of international law relating to the environment—or the systems which can provide assistance for decision makers on environmental issues that they are not familiar with.

It should be noted that these criteria mentioned in 1.1.1 and 1.1.2 focus on the structure and procedure of dispute settlement mechanisms which can be assessed by considering statutes, rules and procedures in order to ascertain the effectiveness of each mechanisms. However, these issues have been dealt with in chapter 4 in the context of suitability. As far as procedural indicator is concerned, the issue of the participation of all potential parties in the process of dispute settlement has already

¹⁰ Lawrence Susskind and Jeffrey Cruikshank, *Breaking the Impasse: Consensual Approaches to Resolving Public Disputes* (BasicBooks 1987) 24. See also Kütting (n 7) 35.

¹¹ Andrew T. Guzman, ‘International Tribunals: A Rational Choice Analysis’ (2008-2009) 157 U Pa L Rev 171, 205.

¹² *Ibid*, 205.

been discussed in chapter 4 with regard to the suitability of each mechanisms in settling multilateral environmental disputes.¹³ For structural indicator, the issue has been analysed in chapter 4 with regard to the suitability of each mechanism in settling international environmental disputes of a multi-dimensional character.¹⁴ Therefore, in this chapter, procedural and structural indicators will not be applied to the four different dispute settlement mechanisms.

1.2 Output Criteria

1.2.1 Resolution of a Dispute and Its Effect on States' Behaviour

This is the criterion that is the key objective and the most salient to the settlement of a dispute. Dispute settlement mechanisms are designed to solve disputes that are at issue between the disputants. The question that may arise is: Have the key issues been settled? Armin Von Bogdandy and Ingo Venzke state in the context of judicial settlement that this 'leans on the hope that the authority of judicial decisions leads to an end of a dispute that might otherwise even unleash a looming potential for violent confrontation.'¹⁵ Dinah Shelton is of the same view when she claims that 'conflict resolution is a way to avoid self-help and escalation of conflicts by channeling the dispute to a third-party decision maker'.¹⁶ Effectiveness in this sense is also linked to the achievement of the goal of a dispute settlement mechanism.¹⁷ For example, the creation of the ICJ, a principal judicial organ of the UN, has its goal in the peaceful settlement of disputes, although there are no explicit provisions stating this objective in the ICJ Statute, since this is 'a matter of common understanding among the drafters'.¹⁸ Also, the ICJ in the *LaGrand* case held that 'the function of this Court is to resolve international legal disputes between States'.¹⁹ Clearly, an effective mechanism, whether judicial or non-judicial, should attain its goal in resolving a dispute between parties.

¹³ See chapter 4, sections 1.1.1, 1.2.1, 1.3.1, 2.1.1, 2.2.1, 3.1 and 4.1.

¹⁴ See chapter 4, sections 1.1.2, 1.2.2, 1.3.2, 2.1.2, 2.2.2, 3.2 and 4.2.

¹⁵ Armin Von Bogdandy and Ingo Venzke, 'On the Functions of International Courts: An Appraisal in Light of Their Burgeoning Public Authority' (2013) 26 LJIL 4953. See also Karel Wellens, *Negotiations in the Case Law of the International Court of Justice* (Taylor and Francis 2014) 279.

¹⁶ Dinah Shelton, 'Form, Function, and the Powers of International Courts' (2008-2009) 9 Chi J Int'l L 537, 558.

¹⁷ Shany (n 2) 40-42.

¹⁸ Ibid, 165.

¹⁹ *LaGrand (Germany v. United States of America)*(Request for the Indication of Provisional Measures) [1999] ICJ Rep 9, para. 25.

Another point is the theory that equates effectiveness with the compliance rates of the parties with a decision. This theory has been supported by several scholars. For example, Laurence Helfer and Anne-Marie Slaughter are of the view that they will measure ‘the effectiveness of a supranational tribunal in terms of its ability to compel compliance with its judgments by convincing domestic government institutions, directly and through pressure from private litigants, to use their power on its behalf.’²⁰ Eric A. Posner and John C. Yoo take the view that ‘a tribunal is effective if states comply with its judgments. Compliance can be measured in terms of a compliance rate: the number of complied-with judgments divided by the total number of judgments.’²¹ However, there are scholars who make a distinction between effectiveness and compliance rates. According to them, a high level of compliance does not mean that a tribunal is effective in resolving a dispute. Rather, the ability of international courts to induce or encourage States that lose a case to comply with their obligations again is more important than compliance rates. In this sense, low levels of compliance may be considered as effective if the judgment of the international courts can change the behaviour of losing States and avoid future violations of legal rules. As Guzman states, ‘even when a state fails to comply with a tribunal's ruling, the tribunal may be effective at promoting compliance if it imposes sufficient costs on the state to discourage future violations of the underlying legal rule.’²²

Both views are equally reasonable. In the case of the first view, if there has been compliance, the key issues are likely to have been settled. Conversely, if the issues have been settled, there is likely to have been compliance. In turn, if the key issues have been settled, it means that such a mechanism is effective. The second view also provides an additional indicator that focuses on the influence of a decision on the patterns of behaviour of States and ‘the ability to enhance compliance with the associated substantive obligation’,²³ especially where a decision can, borrowing Guzman’s words, discourage future violations of international environmental rules so

²⁰ Laurence R. Helfer and Anne-Marie Slaughter, ‘Toward a Theory of Effective Supranational Adjudication’ (1997) 107 Yale LJ 273, 290.

²¹ Posner and Yoo (n 6) 27.

²² Guzman (n 11) 187.

²³ Ibid, 188. See also Ronald B. Mitchell, ‘Institutional Aspects of Implementation, Compliance, and Effectiveness’ in Urs Luterbacher and Detlef Sprinz (eds), *International Relations and Global Climate Change* (MIT Press 2001) 224.

as to deter the emergence of future disputes.²⁴ Taking these two views together is an appropriate approach to assess the effectiveness of such mechanisms.

Therefore, in this chapter, the effectiveness of dispute settlement mechanisms in settling international environmental disputes will be assessed by considering whether:

- 1) the key issues in a dispute have been settled;
- 2) the losing State complied with the decision;
- 3) the decision had any wider effect on the behaviour of the States parties to the dispute.

The third consideration should be treated with caution. This is because one has to ensure that behavioural changes of States are a direct effect of the decision and do not arise from other factors. This means that a decision can be seen as having ‘materially influenced the behavioural change’.²⁵ It has to be recognised here that it may not always be easy to know if there is a causal connection. Behaviour changes can be observed from documentary evidence that show that there is a causal connection which will be quoted at appropriate points later in the chapter.

1.2.2 Mechanisms to Induce Compliance

Before a decision is given, much time and effort will be used by the parties and decision-makers in the process of dispute settlement. In a case where both of them—or the losing State—refuse to comply with the decision explicitly or implicitly, one can ask the question of how the decision-maker will deal with this situation. Are there mechanisms to encourage the parties to comply with the decision? In this sense, it is a matter of effectiveness that entails the availability of a mechanism that can induce compliance with a decision. This is because there is the likelihood that a dispute may be prolonged if a decision is ignored.

The availability of means to induce compliance with decisions can be used as an indicator of effectiveness. This is a phase that is called the post-decision-making phase—the period that involves the question of what happens after the decision-makers have performed their task. Therefore, the effectiveness in this regard will be

²⁴ See also Richard Bilder, ‘The Settlement of Disputes in the Field of the International Law of the Environment’ (1975) 144 *Recueil des Cours* 139, 162.

²⁵ Laurence R. Helfer, ‘The Effectiveness of International Adjudicators’ in Cesare Romano, Karen J. Alter and Chrisanthi Avgerou (eds), *The Oxford Handbook of International Adjudication* (OUP 2013) 469. See also Michael A. Mehling, ‘Betwixt Scylla and Charybdis? Effectiveness in International Environmental Law’ (2002) 13 *Finnish Ybk Intl L* 129, 151.

assessed by considering whether or not particular dispute settlement mechanisms have systems that are designed to induce compliance.

To sum up, the criteria that will be applied in part 2 of the chapter are: 1) resolution of a dispute and its effect on States' behaviour and 2) the availability of mechanisms to induce compliance. Thus, the discussion effectiveness focuses purely in terms of outcomes leaving aside the discussions of procedural and structural indicators for the reason stated above.

2. APPLYING THE CRITERIA OF EFFECTIVENESS TO DISPUTE SETTLEMENT MECHANISMS: OUTPUT CRITERIA

2.1 Resolution of a Dispute and Its Effect on States' Behaviour

In this section, as has been explained in detail in section 1.2.1, resolution of a dispute and its effect on States' behaviour will be considered to see whether the key issues have been settled, whether the losing State complied with the decision and whether a State has changed its behaviour as a direct consequence of the decision. In answering these questions, the approach used in this section will be a case-based analysis in which cases that have been brought before international courts and non-judicial means in the past will be examined. This approach is different from the approach in chapter 4 which is to look at the issues more theoretically by examining the features of different mechanisms. This cannot really be done for assessing dispute resolution and compliance, since the answers to the research questions would be that the mechanisms are supposed to resolve disputes, the parties are supposed to comply and change their behaviour. It should be noted, however, from the outset that this approach has limitations. Such limitations include the difficulty of making generalisations about dispute solving and compliance from a small number of cases. In this section conciliation will not be discussed, since there have been no cases settled by this means.

2.1.1 Mediation

The only case that was settled by mediation of which the author is aware was the case concerning the Indus waters dispute between India and Pakistan. The key issue of this case is the equitable sharing and managing of the water of the rivers in the Indus

Basin. The dispute was concerned with the legal rights of India and Pakistan in the waters of the rivers that flowing into Pakistan through India.²⁶ India cut off the flow of waters to the canal that flowed through the boundary line and claimed the proprietary rights in the waters of the rivers situated in its territory and Pakistan could not claim any share of the waters.²⁷ Pakistan, as a lower riparian State, claimed that it had the right to the uninterrupted flow of waters according to the rules of international law and equity based on the historic use of the river, and India, as the upper riparian State, had to divert the waters accordingly.²⁸ At that time, there was no treaty between them to regulate the use of the waters. The dispute was finally settled by the World Bank after 8 years from the time that the World Bank had begun to mediate the dispute. Throughout 8 years, a series of dialogues had been taking place.²⁹ Also, there were the Bank proposals as well as the parties' own proposals and plans that had been negotiated and discussed before they culminated in the conclusion of the Indus Waters Treaty (IWT) which can be considered as the outcome of the process of dispute settlement. The mediation in this case was a continuous process in which the ultimate outcome was produced in the form of a treaty as a result of negotiations between all the parties as well as the mediator rather than being produced in the form of a judgment made by judges.

The Bank brought the parties together and encouraged them to sign the IWT on 19 September 1960, which can be considered as a success on the part of the Work Bank which acted as mediator.³⁰ The two main things that were the key factors in contributing to the settlement of the dispute were the possibility of increasing the amount of water by the construction of works and the ability of the World Bank to encourage the participation of several States to provide international financial support for the works, which was a kind of 'quasi-imperial third-party inducement to the successful resolution of the dispute'.³¹ In addition, with specialist knowledge of the

²⁶ S.C. Agrawal, 'Legal Aspects of the Indo-Pakistan Water Dispute' (1958) 21 SCJ 157, 159.

²⁷ See the Inter-Dominion Agreement between the Government of India and the Government of Pakistan on the Canal Water Dispute between East and West Punjab (signed 4 May 1948) 54 UNTS 45. See also Friedrich Joseph Berber, 'The Indus Water Dispute' (1957) 6 Indian Ybk IntAff 46, 52.

²⁸ Ibid, 52.

²⁹ See International Bank for Reconstruction and Development, 'Indus Waters' Press Release No. 380, 10 December 1954 cited in Niranjan Das Gulhati, *Indus Waters Treaty: An Exercise in International Mediation* (Allied Publishers 1973) 135.

³⁰ Salman M.A. Salman and Kishor Uprety, *Conflict and Cooperation on South Asia's International River: A Legal Perspective* (Kluwer Law International 2002) 57.

³¹ See Jagat S. Mehta, 'The Indus Water Treaty: A Case Study in the Resolution of an International River Basin Conflict' (1988) 12 Natural Resources Forum 69, 75. See also Stephen McCaffrey, *The*

World Bank concerning the use of international watercourses, Lammers notes that ‘it has been the considerable merit of the International Bank for Reconstruction and Development to have brought about the settlement of the Indus basin waters dispute through skillful mediation by providing technical and financial assistance.’³² In settling the dispute, it helped to establish a new regime applicable to the utilisation of the Indus.³³ In this sense, this kind of dispute can hardly be settled by international courts because, as has been noted by Charles Rousseau,

‘le règlement d'un différend fluvial est beaucoup moins, en droit international, un problème d'interprétation du droit existant qu'un problème d'élaboration d'un droit nouveau et que, dans cette mesure, il peut difficilement être résolu par l'application des procédures arbitrales ou judiciaires habituelles.’³⁴

It can be said that the key issue with regard to the use of Indus waters was settled and the parties followed what the World Bank attempted to do.

In relation to behavioural changes, it can be said that the parties modified their behaviour after the treaty was signed as a result of the mediation carried out by the World Bank. The conclusion of the treaty means that the parties are obliged to respect the obligations contained in the Treaty. Neither of the sides could uphold their previous positions once the treaty was signed. Their behavioural changes in allocating the waters are undoubtedly a direct consequence of the existence of the treaty which is regarded as an achievement of the World Bank mediation. The treaty allocates three western rivers (the Indus, the Jhelum and the Chenab) to Pakistan and three eastern rivers (the Ravi, the Beas and the Sutlej) to India. The treaty changed Indian behaviour in the sense that it cannot claim exclusive rights to the water based merely

Law of International Watercourses (2 edn, OUP 2007) 291. Australia, Canada, Germany, New Zealand, Pakistan, the UK, the US and the World Bank signed the Indus Basin Development Fund Agreement with a view to contributing grant money to the establishment and functioning of the Indus Basin Development Fund, (signed 19 September 1960, entered into force 12 January 1961) 444 UNTS 259.

³² Johan G. Lammers, *Pollution of International Watercourses: A Search for Substantive Rules and Principles of Law* (Nijhoff 1984) 310. See the same view of Judge Stephen M. Schwebel who observed in that ‘the Indus Waters Treaty was a great achievement of Pakistan and India and of the World Bank’ PCA Press Release, the Indus Waters Kishenganga Arbitration (Pakistan v. India), September 2012, available at <http://www.pca-cpa.org/showfile.asp?fil_id=1970> accessed 16 June 2015.

³³ Georges Fischer, ‘La Banque Internationale pour la Reconstruction et le Développement et l’Utilisation des Eaux de l’Indus’ (1960) 6 AFDI 669, 683.

³⁴ Charles Rousseau, ‘Inde et Pakistan: Conclusion du Traité du 19 Septembre 1960 Relatif à l’Utilisation des Eaux de l’Indus’ (1961) 32 RGDIP 364, 376. See also Berber (n 27) 61.

upon the fact that it is the upper riparian. Moreover, given the fact that India accepted the principle of payment as requested by Pakistan for the deviation of water in Indian Territory, India endorsed the principle of limited territorial sovereignty of the upper riparian State which meant that it automatically renounced its previous position.³⁵ Instead, the principle of equitable utilisation would be applied in this case. However, after the conclusion of the Treaty, two disputes arose with regard to the application of the Treaty and allegations of non-compliance. They will be discussed below in the sections concerning inquiry and arbitration.

2.1.2 Inquiry

2.1.2.1 Baglihar Hydroelectric Dam

There is a case concerning the construction of India's Baglihar hydroelectric dam between Pakistan and India that has been referred to inquiry for settlement and need to be appraised as to the effectiveness of inquiry in settling the disputes. This case is the first dispute arose under the IWT after it had entered into force. As to the point of law, the dispute was essentially about the breach of obligations contained in the IWT, especially those provided in Annexures, namely the provisions in Part 3 of Annexure D with regard to the New Run-of-River Plant. Pakistan claimed that the construction of the Pondage was not conform with the requirements³⁶ and was not based on 'correct, rational and realistic estimates of maximum flood discharge at the site'.³⁷ India disagreed with Pakistan.

The dispute was decided by Professor Raymond Lafitte with the support of Professor Laurence Boisson de Chazourne, both were appointed by the World Bank. The final decisions were produced in the form of a so-called Expert Determination. It mainly dealt with the assessment of hydrological information. Professor Lafitte, recommended 6 technical solutions for the parties to settle the dispute, namely maximum design flood, spillway (ungated or gated), spillway (the level of the gates), artificial raising of the water level, pondage and the level of the power intake³⁸ supported its findings with technical information in terms which the Neutral Expert

³⁵ Salman and Uprety (n 30) 61.

³⁶ Para. 8 (c) of Annexure D to the IWT provides that 'The maximum Pondage in the Operating Pool shall not exceed twice the Pondage required for Firm Power'.

³⁷ Raymond Lafitte, 'Baglihar Hydroelectric Plant: Expert Determination: On Points of Difference Referred by the Government of Pakistan under the Provisions of the Indus Waters Treaty' (2007) 4.

³⁸ Ibid, 8-20.

(NE) regarded as 'state of the art' standards.³⁹ All of these technical issues required Professor Lafitte to interpret the obligations set out in the IWT with the assistance of lawyers taking into account 'a spirit of goodwill and friendship and 'a co-operative spirit',⁴⁰ as well as 'the best and latest practices in the field of construction and operation of hydro-electric plants.'⁴¹

Although the findings of the inquiry were, to some extent, unfavourable to India in the sense that some of the structures of the dam, not the overall designs, were incompatible with the criteria provided in the IWT, such as the modification of pondage capacity and lowering the height of the existing dam structure from 4.5 meters to 3 meters, the findings seemed to be more receptive to the Indian side than to the Pakistani side.⁴² The findings were interpreted in different ways by the parties. India took the view that the findings 'confirm that India's design has been compliant with the basic principles of the Indus Waters Treaty'.⁴³ For Pakistan, the findings confirmed that the building of the dam, to some extent, was incorrect and that it was a breach of the IWT. Although the findings seemed to favour Pakistan, in reality it was disappointed with the findings, since the inquiry overruled some of the arguments that it put forward.⁴⁴ That is to say the issue of spillway gates remained unaddressed.⁴⁵ Nevertheless, Pakistan took the view, at least in its official stance, that this case was a 'win-win situation'⁴⁶ and 'the difference has been removed and it is, therefore, not considered as a dispute' which made it unnecessary to raise the issue before an

³⁹ Ibid, see Determination D 2 (p. 10); D 3 (p.11); D 4 (p.15); D 5 (p.16, 17); D 6 (p.18) such state of the art standards that the NE referred to are those of, for example, information in the Bulletin of the International Commission on Large Dams (ICOLD) and ICOLD guidelines and sound engineering.

⁴⁰ Ibid, 5.

⁴¹ Ibid, 5.

⁴² Robert G. Wirsing, Christopher Jasparro and Daniel C. Stoll, *International Conflict over Water Resources in Himalayan Asia* (Palgrave Macmillan 2012) 92. See also BBC, 'World Bank Rules on Kashmir Dam' (13 February 2007) <http://news.bbc.co.uk/1/hi/world/south_asia/6356061.stm> accessed 10 June 2015.

⁴³ See Indian positions, Ministry of External Affairs, Government of India, 'Baglihar Dam Cleared by Neutral Expert' (12 February 2007), available at <<http://www.mea.gov.in/press-releases.htm?dtl/2287/Baglihar+Dam+cleared+by+neutral+expert>> accessed 12 June 2015.

⁴⁴ See the interviews of members of the Pakistani team conducted by Wirsing, Jasparro and Stoll (n 42) 92, the details appeared in footnote 25. See also Amer Rizwan Khattak, 'World Bank Neutral Expert's Determination on Baglihar Dam: Implications for India-Pakistan Relations' (2008) 61 PH 89, 96.

⁴⁵ See <<http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1171996340255/BagliharSummary.pdf>> accessed 12 June 2015.

⁴⁶ Nabih Gul and others, 'Pakistan's Foreign Policy Survey January - June 2007—Staff Study' (2007) 60 PH 3, 4.

arbitral tribunal.⁴⁷ Therefore, it can be concluded that the findings of the inquiry brought the dispute to an end, since both the parties accepted the findings and India agreed to comply with them.⁴⁸ It has been reported that the structure of the dam was constructed according to the conditions provided in the findings.⁴⁹ With regard to behavioural changes it can hardly be said that the parties have changed their behaviour in utilising the Indus waters in the light of the IWT, since another dispute arose between them concerning the application and interpretation of the Treaty. The dispute was brought before judicial mechanism and will be discussed below in the *Indus Waters Kishenganga Arbitration*.

2.1.2.2 Danube-Black Sea Navigation Route Project

In this case, Romania and Ukraine were in dispute with regard to the likelihood of significant transboundary impacts on the Danube-Black Sea navigation route at the border between the two countries. The inquiry commission was established in accordance with the provisions of Appendix IV to the Espoo Convention.⁵⁰ The key issue that the inquiry commission was asked to advise on was whether or not the project would have the likelihood of having significant adverse transboundary impacts on the construction and use of the Navigation Route and ‘the dredging and maintenance of the entrance channel and the rifts in the Danube River and the dumping of dredged spoil on riparian land or at a dump site offshore at sea’ carried out by Ukraine.⁵¹ For the purpose of measuring the effectiveness of the inquiry in settling the dispute, it is appropriate to frame the question in this way: Were the findings of the inquiry commission accepted by both the parties? In 2006, the report of the inquiry commission came out, in which it concluded unanimously that there had been a likelihood of significant adverse transboundary impacts on six subjects, such as the impact of the dredging or deepening of the rifts which could lead to the loss of floodplain habitats, impacts on the turbidity of marine waters and impacts on

⁴⁷ See the Pakistani position in this regard in *ibid*, 4 and see Art. IX and Annexure G (Court of) of the 1960 Indus Waters Treaty. See also Dawn-Editorial, ‘Verdict on Baglihar Dam’ (14 February 2007) <<http://www.dawn.com/news/1069839>> accessed 13 June 2015.

⁴⁸ Embassy of India, ‘Baglihar Dam Cleared by Neutral Expert’ (12 February 2007), see particularly para. 14, available at <https://www.indianembassy.org/archives_details.php?nid=926> accessed 13 June 2015.

⁴⁹ See *Indus Waters Kishenganga Arbitration*, para. 469. See also Balraj Sidhu, ‘The Kishenganga Arbitration: Transboundary Water Resources Governance’ (2013) 43 EPL 147, 158.

⁵⁰ See generally in Bogdan Aurescu, ‘The Ukrainian “Bystroe Canal” Project in the Danube Delta: Between Political Interest and International Environmental Law’ (2006) 59 RHDI 553.

⁵¹ The Report of the Espoo Inquiry Commission, 9.

the increase of suspended sediment concentration.⁵² The inquiry commission also recommended that a Bilateral Research Programme should be established with a view to dealing with the scientific information and knowledge concerning the operation of dredging a Navigation Route and working in collaboration with the other international research activities.⁵³ Furthermore, measures to mitigate the environmental impacts were proposed, such as the introduction of modern dredging and dumping techniques.⁵⁴

As stated in the document released by Ukraine entitled ‘Final Decision Taken by Ukraine Concerning the Full Scale Implementation of the Danube-Black Sea Navigation Route Project in the Ukrainian Part of the Danube Delta’, Ukraine adopted several measures to comply with the recommendations of the inquiry commission, such as those of establishing a comprehensive environmental monitoring programme, changing the old technique of dredging activities to good modern practices and creating an international expert group with a view to facilitating cooperation with Romania in relation to the identification and assessment of transboundary impacts on the ecological status of the Danube Delta.⁵⁵ A number of measures were adjusted to take account of the findings of the inquiry commission. To ensure that it complied with the obligation set out in the Espoo Convention, Ukraine informed Romania about the implementation of maintenance dredging activities. Romania was also furnished with the EIA documentation and a consultation was carried out. Based on the information provided, one can perceive behavioural changes of Ukraine in dredging the Danube, since it expressly stated in the document that it intended to follow the recommendation of the inquiry commission.⁵⁶ The ways in which the Danube is used have changed, since the findings were given. Efforts to comply with the recommendations have been demonstrated by Ukraine, since more environmentally

⁵² Ibid, 58-59.

⁵³ Ibid, 63.

⁵⁴ Ibid, 63.

⁵⁵ Ministry of Foreign Affairs of Ukraine, ‘Final Decision Taken by Ukraine Concerning the Full Scale Implementation of the Danube-Black Sea Navigation Route Project in the Ukrainian Part of the Danube Delta’ (17 January 2008) this document was addressed to the Ministry of Foreign Affairs of Romania, available at <<http://www.unece.org/fileadmin/DAM/env/pp/compliance/MoP2decisions/Ukraine/Bystroe/Final%20decision%20Ukraine%20Bystroe.pdf>> accessed 11 June 2015. See more details in Annex 4 and Annex 5 of this document.

⁵⁶ See for example in the Summary Report on the Assessment of Likely Transboundary Environmental Impacts of the Danube-Black Sea Navigation Route in the Ukrainian Part of the Danube Delta which was submitted to the Espoo Implementation Committee, available at <http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.1/BCP_TEIA_30dec08_sect_5.pdf> accessed 11 June 2015.

friendly techniques have been introduced, and cooperation between the parties has been strengthened. All of these changes are the fruit of the work of the inquiry commission. However, according to the Compliance Committee of the Espoo Convention, the full compliance with the obligations of the Espoo Convention in relation to the project needs to be further improved and bilateral agreement between the two States still needs to be further developed in order to bring about the full implementation of the Convention.⁵⁷

2.1.3 Arbitration

2.1.3.1 *Ad Hoc* Arbitration

Before discussing the cases, it should be noted from the outset that some cases need to be excluded from the discussion, since there is very limited information on tracking what happened after the awards and because of their age and subject matter they are less significant for the law of environmental protection.⁵⁸

(1) *The Bering Sea Fur-Seals Arbitration*

The dispute was concerned with the preservation of seals that lie outside the exclusive control of any one State. The US established exclusive jurisdiction over sealing activities in the area which was beyond the limits of US territorial waters so as to prevent British vessels from hunting seals.⁵⁹ British vessels engaging in sealing activities were seized by the US authorities.

The arbitrators were faced with the question which the parties asked them to indicate whether the US had any right, and if it had, ‘what right of protection or property in the fur-seals frequenting the islands of the US in the Bering Sea when

⁵⁷ See the Meeting of the Parties at its Sixth Session, Decision on Review of Compliance (Decision VI/2) (Geneva, 2-5 June 2014) ECE/MP.EIA/20.Add.1—ECE/MP.EIA/SEA/4.Add.1 paras. 15-28, available at <http://www.unece.org/fileadmin/DAM/env/eia/decisions/Decision_VI.2.pdf> accessed 11 June 2015>.

⁵⁸ Those cases are (1) *Helmand River Delta* cases The first award was rendered in 1872 see the full text in Frederic John Goldsmid, *Eastern Persia: An Account of the Journeys of the Persian Boundary Commission 1870-71-72*, vol 1 (Macmillan and Co. 1876) 410-414. The second award was rendered in 1905 see details of the awards in C.U. Aitchison, *A Collection of Treaties, Engagements and Sanads Relating to India and Neighbouring Countries*, vol 13 (Superintendent Government Printing 1933) 283-286; (2) the *San Juan River Cases (Costa Rica v Nicaragua)* (1898) 5 Moore Intl Arbitrations 4704 and (3) the *Kushk River* cases see the text in Georg Friedrich de Martens and others, *Nouveau Recueil Général de Traités et Autres Actes Relatifs aux Rapports de Droit International: Continuation du Grand Recueil de G. Fr. de Martens* vol 13 (2^e ème série edn, Dieterich 1888).

⁵⁹ The US enacted the act entitled ‘An Act to Prevent the Extermination of Fur-Bearing Animals in Alaska’ which was made unlawful to kill fur seal in the islands of St. Paul and St. George: see *Bering Sea Fur Seals Arbitration*, 763-764.

such seals are found outside the ordinary three-mile limit?’⁶⁰ The majority of the arbitrators decided this question in the negative by pronouncing that ‘the US has not any special right of protection or property in the fur seals frequenting the islands of the US in the Bering Sea, when such seals are found outside the ordinary three-mile limit’.⁶¹

Having found that the US had no property rights in or right of protection and preservation of the fur seals in the Bering Sea found outside the ordinary three-mile limit, the tribunal needed to determine regulations for the proper protection and preservation of the fur seals according to the 1892 Arbitration Treaty between Great Britain and the United States.⁶² To achieve this task, a Joint Commission was established with a view to providing assistance to the arbitrators. The regulations adopted by the Commission required⁶³

1. Both States to prohibit their citizens from killing, capturing or pursuing fur seals within a zone of sixty miles in radius about the Pribilof Islands
2. Both states to observe the period from 1st May to 31st July as a closed season for taking fur seals on the high sea, in the part of the Pacific Ocean, inclusive of the Bering Sea.
3. Fur-seal fishing operations to be carried out only by sailing vessels
4. The use of nets, firearms and explosives to be prohibited in fur-seal fishing operations.

After the award was rendered, the US legislated the Act of Congress entitled ‘An Act to give effect to the Award rendered by the Tribunal of Arbitration at Paris, under the treaty between the United States and Great Britain, concluded at Washington, February 29, 1892, for the purpose of submitting to arbitration certain questions concerning the preservation of the fur-seals’ with the same content as provided in the award for carrying into effect the award of the Tribunal. This means it can be concluded that the dispute was successfully resolved and the award was,

⁶⁰ Art. VI of the Convention between the Governments of the United States and Her Britannic Majesty, Submitting to Arbitration the Question which have arisen between those Governments concerning the Jurisdictional Rights of the United States in the Waters of Behring Sea (signed 29 February 1892) see the text in US, *Message from the President of the United States: Transmitting a Convention Signed at Washington, February 29, 1892, between the Governments of the United States and Her Britannic Majesty, Submitting to Arbitration the Questions which Have Arisen between those Governments Concerning the Jurisdictional Rights of the United States in the Waters of Bering, Sea, etc.* (Washington 1982) (hereinafter the UK-US Convention).

⁶¹ Bering Sea Fur Seals Arbitration, 920.

⁶² See Art. IX of the UK-US Convention.

⁶³ Bering Sea Fur Seals Arbitration, 949-951.

undoubtedly, complied with by the US.⁶⁴ As far as the effect of the award on the behaviour of the parties is concerned, although it was reported that the regulations proved to be ineffective, since the catch from pelagic sealing increased and the seal herd continued to decline⁶⁵, the two States collaborated with each other to amend the regulations and instituted independent scientific investigations to deal with the issue.⁶⁶ Consequently, the US strengthened the regulations by enacting a law prohibiting American citizens from being involved in pelagic sealing at any time or place.⁶⁷ After the scientific investigations were completed, the position of the US changed. It took the view that the Award's regulations were 'wholly inadequate to protect and preserve the seal herd'.⁶⁸ Therefore, with a view to protecting the seal herd from destruction, it wished to internationalize the award rendered by the Tribunal by inviting Japan and Russia to adhere by the award through the conclusion of a treaty.⁶⁹ Finally, the 1911 Convention for the Preservation and Protection of Fur Seals in the North Pacific Ocean was concluded.⁷⁰ All of these outcomes can be understood to be a direct consequence of the award which was designed to change the behaviour of States in terms of improving their cooperation in conserving seals. That is to say the award has had some influence on the subsequent practices of States in relation to the preservation of seals from extinction, such as the conclusion of the later treaties, and it could also be regarded as a stepping-stone towards further cooperation.⁷¹ Moreover, the award also, in the words of Sands and Peel, 'shaped the form and content of subsequent agreements to conserve marine living resources'.⁷²

⁶⁴ Acts of Congress, President's Proclamations, Regulations Governing U.S. Vessels, Acts of Parliament, Orders in Council, Pertaining to the Fur-Seal Fisheries in Behring Sea and North Pacific Ocean (Government Printing Offices 1896) 23.

⁶⁵ See William Williams, 'Reminiscences of the Bering Sea Arbitration' (1943) 37 AJIL 562, 584.

⁶⁶ Wilfred H. Osgood, Edward A. Preble and George H. Parker, *The Fur Seals and other Life of the Pribilof Island, Alaska, in 1914* (Government Printing Office 1915) 22.

⁶⁷ *Ibid*, 22.

⁶⁸ Editorial Comment, 'The Fur Seal Question' (1907) 1 AJIL 742, 746.

⁶⁹ *Ibid*, 746-747.

⁷⁰ Convention between Great Britain, Japan, Russia and the United States Requesting Measures for the Preservation and Protection of Fur Seals in the North Pacific Ocean (signed 7 December 1911) (1911) 214 CTS 80.

⁷¹ Cesare P.R. Romano, *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach* (The Hague Kluwer Law International 2000) 48.

⁷² Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (3 edn, CUP 2013) 400.

(2) The *Trail Smelter Arbitration*

The *Trail Smelter Arbitration* between Canada and the US is the first dispute that involves transboundary air pollution. The dispute was about the operation of the Smelter which was carried out at Trail, Canada, around eleven miles from the international boundary between Canada and the US. The Trail smelter emitted sulphur dioxide across the border so as to caused damage to the property in the state of Washington. The parties agreed to constitute a Tribunal in order to decided the questions which were relating to the indemnity or compensation that shall be paid, measures and régime that shall be adopted or maintained by the Trail smelter.⁷³

In this case, after the Tribunal pronounced the classic passage that no State has the right to use its territory in such a manner as to cause injury by fumes in or to the territory of other States, it held that the Dominion of Canada was responsible in international law for the conduct of the Trail Smelter and had violated its international obligations.⁷⁴

The Tribunal imposed a régime with a view to controlling the emission of sulphur dioxide fumes from the smelter, which included a number of measures such as the restriction of the emissions expressed in terms of tons per hour. Finally, in answering the question relating to indemnity or compensation, the Tribunal held that an indemnity shall be paid in the event of future damage. In addition, the US shall pay not in excess of \$7,500 in any one year for the reasonable costs of investigations as compensation.⁷⁵

The régime was accepted by the Canada and the US in which \$20,000,000 were spent with this regard by the Canadian firm.⁷⁶ Compensation was paid to the US ‘as a consequence of the decision of the international tribunal’.⁷⁷ Also, the Company that owned the smelter removed more sulfur dioxide releasing from the stacks than it was taken from the stacks of all other smelters operated in the North American Continent combined.⁷⁸ Judging from what the parties agreed after the decision was

⁷³ Ibid, 1908.

⁷⁴ Ibid, 1965.

⁷⁵ Ibid, 1980.

⁷⁶ Alfred P. Rubin, ‘Pollution by Analogy: The Trail Smelter Arbitration’ (1970-1971) 50 Or L Rev 259, 272.

⁷⁷ The amount of money paid by Canada appeared in the Exchange of Notes Constituting an Agreement Supplementing the Convention of 15 April 1935 Relating to Claims on Account of Damages Caused by Fumes Emitted from the Smelter at Trail, British Columbia, 151 UNTS 171.

⁷⁸ John E. Read, ‘The Trail Smelter Dispute’ (1963) 1 Canadian Ybk Intl L 213221.

rendered, the long-standing dispute between them was successfully resolved and they modified their behaviour with regard to air pollution control.

(3) The *Lac Lanoux Arbitration*

The central issue of this case was whether the French utilisation of the waters of Lake Lanoux, which lies wholly within French territory, was a breach of the Treaty of Bayonne and the Additional Act for the joint use of the waters. Spain, the lower riparian State, alleged that the project related to energy production proposed by France would affect its right in term of the quantity of water that it would receive and the project could only be carried out with prior conclusion of an agreement of the parties.⁷⁹

The Tribunal gave the Award which can be divided into two main issues.⁸⁰ Firstly, the Tribunal held that the diversion of the waters of Lake Lanoux with the restitution of an equivalent quantity of waters executed by France did not violate the rights of Spain, which did not constitute a breach of the Treaty of Bayonne and the Additional Act, since it would not alter the waters of the Carol.⁸¹ Secondly, under the Treaty of Bayonne and the Additional Act, France was not subjected to the necessity of a prior agreement for the execution of the Electricité de France scheme which meant that Spain did not have the right to approve or disapprove of the scheme, so that France did not breach the Treaties when it carried out the scheme without prior agreement between them.⁸² But France still had duties to inform and consult with Spain in good faith as well as to take Spanish interests into account.⁸³ Since France was not in a breach, the issue of compliance and possible behavioral changes of France does not arise. However, it should be noted that the arbitration did settle the dispute in the sense that relations between France and Spain concerning the use of the waters of Lac Lanoux became more harmonious after the award because in 1958 they concluded an agreement setting up a regime with regard to the development of Lac Lanoux considering the award rendered by the Court of Arbitration.⁸⁴

⁷⁹ *Lac Lanoux Arbitration*.

⁸⁰ *Ibid*, 121.

⁸¹ *Ibid*,

⁸² *Ibid*,

⁸³ *Ibid*,

⁸⁴ Agreement Relating to Lake Lanoux (with an arrangement concerning the lake's development) (signed and entered into forced 12 July 1958) 796 UNTS 235.

(4) The *Iron Rhine Arbitration*

In the *Iron Rhine Arbitration* between Belgium and the Netherlands, the dispute was about the reactivation of an old train line linking the port of Antwerp in Belgium to the Rhine basin in Germany, via the Netherlands.⁸⁵ Belgium had an intention to modernise this railway in the Dutch territory with a view to achieving its economic interests as well as combating global warming.⁸⁶ The central issue of the dispute were the application of Dutch law for such a reactivation and the allocation of costs associated with the modernisation plans in which the Netherlands argued that Belgium should bear all costs including the costs required for compliance with Dutch environmental legislations.⁸⁷

The Tribunal held, after it had stated that rules of international law relevant to the protection of the environment were applicable between the parties in the interpretation of the conventional regime for the Iron Rhine railway⁸⁸, that in developing the project—which corresponds to Belgian economic needs—environmental protection measures needed to be taken into account as ‘an integral component of such a project’⁸⁹ so as to make a reconciliation with the Netherlands’ legitimate environmental concerns.⁹⁰ Furthermore, the costs and expenses of the environmental measures required by Netherlands law should be integrated into Belgium’s project of the reactivation of the Iron Rhine railway as part of its exercise of its right of transit.⁹¹ The Tribunal further held that the parties should share the obligations to bear the costs and financial risks in equal parts with regard to any tunnel for environmental protection that may be built in the area that was designated as a national park or a silent area.⁹² However, the Tribunal did not determine which measures ‘will be sufficient to achieve compliance with the required levels of

⁸⁵ *Iron Rhine Arbitration*, para. 16.

⁸⁶ *Iron Rhine Arbitration*, Memorial of Belgium, para. 19.

⁸⁷ *Iron Rhine Arbitration*, Counter-Memorial of the Netherlands, para. 3.3.12.

⁸⁸ Although the railway project had begun 120 years ago and had been extended and ungraded in the present, the tribunal stated that new norms had to be taken into consideration. In this regard, the Tribunal referred to what is known as the concept of sustainable development which appeared in EC Law, Principle 4 of the Stockholm Declaration and the jurisprudence of the ICJ in the *Gabčíkovo-Nagymaros* case, see paras. 58-59. See also the *Legality of the Threat or Use of Nuclear Weapons* case in respect of the obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control, see para. 222.

⁸⁹ *Iron Rhine Arbitration*, para. 220.

⁹⁰ *Ibid*, para. 221.

⁹¹ *Ibid*, para. 226.

⁹² *Ibid*, para. 244 (e).

environmental protection'.⁹³ This question needed to be investigated by a committee of independent technical experts which the Tribunal asked the parties to set up not later than four months from the date of this Award.⁹⁴

Given that the Tribunal considered all major questions of law, it contributed to the settlement of the dispute.⁹⁵ After the Award was rendered, they reached an agreement on further works and activities on development of the reactivation of the Iron Rhine and established a Commission of Independent Experts (COD) to supervise such activities as well as to make a proposal for the division of costs between the two States based on the binding decision of the Tribunal.⁹⁶ Nonetheless, the Award has had a limited impact on the behaviour of the parties because as of 2015 the line had not been reopened and the project is on hold for the time being, because of the disagreement about the execution and funding of the project.⁹⁷

2.1.3.2 Arbitral Tribunals Constituted in accordance with Annex VII of the UNCLOS

The issue of effectiveness does not arise unless the arbitral tribunals have decided the merits of a dispute. Those cases where the arbitral tribunals found that they had no jurisdiction to rule on the case will therefore be excluded from this section. These cases are the *Southern Bluefin Tuna* case, the *MOX Plant* case and the *Land Reclamation* case. The only case that needs to be analysed is the *Chagos Marine Protected Area* case.⁹⁸

In the *Chagos Marine Protected Area* case, several legal issues were addressed by the Tribunal such as the continental shelf claims beyond 200 miles but the most relevant part of the Award to international environmental issues is perhaps the 4th submission of Mauritius with regard to the compatibility of the UK's declaration of the MPA with the UNCLOS provision that deals with the conservation

⁹³ Ibid, para. 235.

⁹⁴ Ibid, para. 235.

⁹⁵ Christian Djéffal, 'The Iron Rhine Case – A Treaty's Journey from Peace to Sustainable Development' (2011) 71 ZaöRV 569, 585-586.

⁹⁶ Final Report: Social Cost Benefit Analysis: Iron Rhine (13 February 2009) 55. See also ProRail, 'IJzeren Rijn' <<https://www.prorail.nl/projecten/ijzeren-rijn>> accessed 19 June 2016.

⁹⁷ EU Parliament, Directorate-General for Internal Policies, Policy Department B: Structural and Cohesion Policies, Transport and Tourism, *Update on Investments in Large Ten-T Projects: Annex Case Studies* (2014) 57.

⁹⁸ Chagos MPA Arbitration.

and preservation of the marine environment. Mauritius claimed that such declaration affected Mauritius's rights and was not for conservation purposes but for the extension of the UK's use of the waters around the Chagos Archipelago⁹⁹ and resettlement claims of the archipelago's former residents.¹⁰⁰ The UK argued that the true purpose of the establishment of the MPA was purely environmental measure.¹⁰¹

The Tribunal held that 'in establishing the MPA surrounding the Chagos Archipelago, the United Kingdom breached its obligations under Articles 2(3), 56(2), and 194(4) of the Convention'.¹⁰² That is to say, the UK had failed to perform its obligation to have due regard for or to engage in prior consultation with Mauritius, since its rights may have been ostensibly affected by the declaration of the MPA. In addition, the MPA, as a kind of measure necessary to protect the marine environment, was established in a manner that could be defined as unjustifiable interference with Mauritian fishing rights in the territorial sea because the UK had shown no evidence to convince the Tribunal that it significantly engaged with Mauritius to provide an explanation for the need of MPA and to explore less restrictive alternatives.¹⁰³ At the time of writing, it is too early to appraise UK's actions in responding to the award in order to test the effectiveness of the arbitration since the judgment was just delivered. It remains to be seen how the UK comply with the award.

2.1.3.3 Non-UNCLOS Disputes Referred Unilaterally to Arbitration

(1) The *OSPAR Arbitration*

In the *OSPAR* arbitration, Ireland claimed that the UK breached its obligation provide in Article 9 (2) of the *OSPAR* Convention by refusing to provided unredacted information concerning UK's commissioning and the operation of the MOX plant at Sellafield so as to prevent Ireland from reviewing the economic justification of the MOX Plant.¹⁰⁴ The UK refused to disclose such information on the ground that it would affect commercial confidentiality.¹⁰⁵ Although the Tribunal found that it had the jurisdiction to rule on the merits of the case, it held that Ireland's claim for information did not fall within Article 9(2) of the *OSPAR* Convention. Therefore, the

⁹⁹ *Chagos MPA Arbitration*, Memorial of Mauritius, Vol 1, para. 1.15.

¹⁰⁰ *Ibid*, para. 7.98.

¹⁰¹ *Chagos MPA Arbitration*, Memorial of the UK, para. 3.74.

¹⁰² *Chagos MPA Arbitration*, para. 547 (B).

¹⁰³ *Ibid*, para. 541.

¹⁰⁴ *OSPAR Arbitration*, Memorial of Ireland, para. 3.

¹⁰⁵ *OSPAR Arbitration*, Counter-Memorial of the UK, para. 1.6.

UK had not breached its obligations under that provision. Since UK was not in a breach, the issue of compliance and possible behavioral changes does not arise.

(2) The *Indus Waters Kishenganga Arbitration*

In the *Indus Waters Kishenganga Arbitration*, the central issue of the dispute was whether India's delivery of waters of the Kishenganga/Neelum River into another tributary in order to operate the hydroelectric power project (KHEP) was permitted under the IWT.¹⁰⁶ Pakistan claimed that the India's uses of the Kishenganga River would affect Pakistan's hydroelectric projects and the other uses¹⁰⁷ because, under Article III (1), it 'shall receive unrestricted use all those waters of the Western Rivers which India is under an obligation to let flow',¹⁰⁸ except for the use of, *inter alia*, the generation of the hydro-electric power.¹⁰⁹ India invoked such exception to construct and operate the hydro-electric power project.¹¹⁰

The Court of Arbitration accepted that India had the right to divert the waters from the Kishenganga River for the purpose of power generation through the Kishenganga Hydroelectric Project with some circumscriptions that India should perform the followings obligations:

1. A minimum flow downstream to be released from the KHEP dam at 9 m³ per second, a level that was significantly lower than the Pakistani claim of 100 m³ per second and higher than the Indian claim of 4.25 m³ per second, should be maintained for natural flows

2. Drawdown flushing technique to remove sedimentation for the purpose of maintaining the reservoir water level should not be employed, in the present project and all of the future projects, except in the case of an unforeseen emergency

India claimed that the verdict of the Court of Arbitration could be considered as a victory and this helped to confirm that India did not violate the IWT.¹¹¹ Looking carefully at the contents stated in the Award, neither India nor Pakistan could claim a victory, since the Court of Arbitration did not uphold the original claims of the

¹⁰⁶ See generally in Jasmine Moussa, 'Implications of the Indus Water Kishenganga Arbitration for the International Law of Watercourses and the Environment' (2015) 64 ICLQ 697.

¹⁰⁷ Para. 140.

¹⁰⁸ Art. III (1)-(2)

¹⁰⁹ Art. III (2) (d)

¹¹⁰ *Indus Waters Kishenganga Arbitration*, para. 167.

¹¹¹ See Zafar Bhutta and Shahram Haq, 'Kishanganga Project: Victory Claims Cloud Final Arbitration Award' *The Express Tribune* (Pakistan, 22 December 2013) <<http://tribune.com.pk/story/648986/kishanganga-project-victory-claims-cloud-final-arbitration-award/>> accessed 17 June 2015.

parties. For India, although it could proceed with the project, some modifications would need to be made to maintain a minimum flow. As Crook argues, what the Court of Arbitration attempted to do was that it ‘sought to interpret and apply the Treaty in ways intended to maintain the careful balance of rights and obligations that the negotiators of the Indus Waters Treaty in the 1950s struggled to attain.’¹¹²

The question remains whether the parties have changed their behaviour after the Court of Arbitration rendered the Award. In this case, behavioural changes should be considered within the framework of the IWT to see if the parties will respect the obligations provided. For India, its behavioural changes need to be seen in terms of whether it is complying with the Awards and the IWT. As the Awards did not hold that India should not build dams on the river, India may construct the dam as long as its constructions of hydropower are in compliance with the obligations provided in the Treaty as interpreted in the Award.

Nowadays, several new hydropower dams are being built—such as Bursar, Gyspa and Sawalkot—which may cause damage to Pakistan in respect of the timing of the flows of the rivers.¹¹³

It is hard to predict whether India will comply with the obligations and Pakistan will stop claiming that India is violating the Treaty. There is a possibility that a dispute may arise under this Treaty at any time. The root causes of the dispute over the utilisation of the Indus waters cannot be easily resolved, since the two States have a very long history of political tensions which may impede any future collaborations between them in respect of harnessing the river. Viewed in a larger context, what can be seen from the Indus waters dispute is that, even though the dispute has actually been settled, the conflicts between the two States have hardly been attenuated merely by the fact that the dispute was put into the dispute settlement mechanism provided by the IWT. The heart of the problem lies in the ‘discontentment and mistrust between

¹¹² John R. Crook, ‘In re Indus Waters Kishenganga Arbitration (Pakistan v. India)’ (2014) 108 AJIL 308, 314. Prakash Pillai and Umer Chaudhry who state that ‘the Court provided a balanced ‘win-win’ solution rather than “all or nothing” outcome’: see in ‘Kishenganga Arbitration and Viability of International Arbitration in Resolving State-to-State Disputes’ Kluwer Arbitration Blog (16 July 2015), available at <<http://kluwerarbitrationblog.com/2015/07/16/kishenganga-arbitration-and-viability-of-international-arbitration-in-resolving-state-to-state-disputes/>> accessed 1 June 2016. See also Jawad Ahmad, ‘The Indus Waters Kishenganga Arbitration and State-to-State Disputes’ (2013) 29 AI 507, 529-533

¹¹³ See generally in F. Naz, ‘Water: A Cause of Power Politics in South Asia’ in C.A. Brebbia (ed), *Water and Society II* (WIT Press 2013) 106-107.

the Parties'¹¹⁴ and 'lower riparian anxieties'¹¹⁵ due to the fear that India would obstruct the flow of the river which means that Pakistan keeps on claiming that India is violating the IWT. The growing demand for water is a factor that can create a dispute between the two States. Thus, the overall behavioural changes in terms of using the Indus waters do not depend solely on the outcome of the Court of Arbitration. Bharat Desai and Balraj Sidhu have rightly pointed out that 'persistent complaints by Pakistan that India is violating the IWT and its efforts to drag the matter to an international dispute settlement forum at every available opportunity—emanating from deeply entrenched distrust and compulsions of domestic politics—need to be squarely addressed on a priority basis.'¹¹⁶ If India and Pakistan had good relations, that might ensure that the Indus waters would be used in a more collaborative manner than has happened in the present situation. So the conclusion that seems to follow that the two disputes relating to the application and interpretation of the IWT which have been settled have had a limited impact on the behaviour of the parties.

To sum up, the experiences of arbitration shows that arbitrations settled the *Bering Sea-Fur Seals* and *Trail Smelter* cases and could influence the parties' behaviour. However, in the *Iron Rhine* and the *Indus Waters Kishenganga Arbitrations*, the disputes were settled but the parties' behaviour has not changed.

2.1.4 International Courts

2.1.4.1 The International Court of Justice (ICJ)

In analysing the cases it is appropriate to start by looking at the key environmental issues which were disputed between the States before examining whether they have been settled. To do this, the cases will be discussed in chronological order. This discussion will not include the *Fisheries Jurisdiction* case because it was concerned mainly with a zone of exclusive fisheries jurisdiction extended by Iceland rather than the protection of fish stocks or the marine environment. The *Nauru* case and the *Aerial Herbicide Spraying* will also be excluded because the cases were settled by

¹¹⁴ Sidhu (n 49) 157.

¹¹⁵ Ramaswamy R. Iyer, 'Dealing with Pakistan's Fears on Water' *The Hindu* (India, 28 January 2012) <<http://www.thehindu.com/opinion/lead/dealing-with-pakistans-fears-on-water/article2837619.ece>> accessed 16 June 2015. See also Ramaswamy R. Iyer, *Towards Water Wisdom: Limits, Justice, Harmony* (Sage Publications 2007) 108.

¹¹⁶ Bharat Desai and Balraj Sidhu, 'The Kishenganga Final Award: Is the Indus Waters Treaty at the Crossroads?' (2014) 49 EPW 10, 12.

means of negotiations and were removed from the list. The 1995 *Nuclear Test* case will not be discussed, since the ICJ dismissed New Zealand's request to examine the merit of a case. In addition, the *Certain Activities/Construction of the Road* cases will also not be discussed because, at the time of writing, the Court has just rendered the judgement. It is too early to appraise Costa Rica's actions in responding to the judgement in order to test the effectiveness of the ICJ. It remains to be seen Costa Rica's policy on this matter to see whether it would conduct an EIA for the future project or how far it could strengthen cooperation with Nicaragua so as to prevent adverse impact to the environment.

(1) The 1974 *Nuclear Tests* case

To begin with the 1974 *Nuclear Tests* case concerning French atmospheric nuclear testing, the environmental obligation raised by Australia and New Zealand was that the radioactive fall-out would contaminate the environment. Principle 21 of the 1972 Stockholm Declaration was also raised by Australia during its oral pleadings. However, the Court did not touch upon any principle of international environmental law when deciding the case. It based its decision on the principle of unilateral acts so as to make the French general announcement in 1974 that it would cease all atmospheric nuclear testing in the South Pacific a binding obligation and the French announcement meant that there was no longer a dispute.¹¹⁷ The dispute was settled, since France stopped atmospheric testing in 1974, although it continued to carry out underground tests in the South Pacific which led to New Zealand's attempt to reopen the case many years later.

(2) The *Gabčíkovo-Nagymaros* case

In the *Gabčíkovo-Nagymaros* case between Slovakia and Hungary, one of the key environmental issues argued by Hungary was that the construction of the dams by Slovakia could be considered as a breach of Article 15 of the 1977 Treaty between the two States such as to have an adverse effect on the ecosystem of the Danube River.¹¹⁸ In this case a 'state of ecological necessity' was raised by Hungary as grounds for the suspension of the 1977 Treaty and the abandonment of the works. The Court was not

¹¹⁷ 1974 *Nuclear Tests* case, 52.

¹¹⁸ Art. 15 of the Treaty of 16 September 1977 concerning the construction and operation of the Gabčíkovo-Nagymaros System of Locks provides that 'The Contracting Parties shall ensure that, by the means specified in the joint contractual plan, the quality of the water in the Danube is not impaired as a result of the construction and operation of the System of Locks.'

convinced by Hungary's argument, since Hungary could not prove the existence of a state of necessity, which should be one of grave and imminent peril. For this reason, Hungary 'would not have been permitted to rely upon that state of necessity in order to justify its failure to comply with its treaty obligations'.¹¹⁹ In the operative part of the judgment the Court held that Hungary was not entitled to suspend the Treaty and abandon its works at Nagymaros.¹²⁰ For Slovakia, the Court ruled that it was entitled to continue to build the Variant C installation unilaterally, but it was unlawful when it proceeded to put it into operation.¹²¹ In addition, the Court asked the parties to negotiate in good faith taking into account the ways in which the objectives of the 1977 Treaty could be achieved.¹²²

There has been a problem relating to the implementation of the judgment which the dispute cannot be said to have been settled. This is partly because the Court did not set out in detail how the future operation of the Project could be finally carried out 'but merely set the parameters within which the agreement should be negotiated and provided the option to bring the matter back to court if necessary'.¹²³ Nor did the Court clarify the amount of water to be released into the main riverbed by Slovakia as reparation for its internationally wrongful act, since it unilaterally used diverted water for its own benefit in the Gabčíkovo area in such a way that it deprived Hungary of its right to an 'equitable and reasonable share of the natural resources of the Danube'.¹²⁴ After the judgment was rendered, the parties started to negotiate, from October 1997 until now, on the issue of how to implement the judgment. Even though a series of bilateral negotiations have taken place, the parties still cannot reach a mutual agreement. This is because the judgment is interpreted differently by the parties.¹²⁵ Insisting on its decision not to build the Nagymaros dam, Hungary based its interpretation on the fact that the parties should determine the legal consequences arising from the judgment and that, in the course of interpretation, three frameworks, as stated in paragraph 141 of the judgment, should be taken into account, namely the

¹¹⁹ *Gabčíkovo-Nagymaros*, para. 57.

¹²⁰ *Ibid*, para. 155 (1) (A).

¹²¹ *Ibid*, para. 155 (1) (B), (C).

¹²² *Ibid*, para. 155 (2) (B).

¹²³ Alan Boyle, 'The Gabčíkovo-Nagymaros Case: New Law in Old Bottles' (1997) 8 YIEL 13, 14.

¹²⁴ See para. 85 and also para. 140 where the Court held only that the parties 'must find a satisfactory solution for the volume of water to be released into the old bed of the Danube and into the side-arms on both sides of the river'.

¹²⁵ See generally in Marcel Szabó, 'Gabčíkovo-Nagymaros Dispute: Implementation of the ICJ Judgment' (2009) 39 EPL 97.

objectives of the 1977 Treaty, the norms of international environmental law and the principles of the law of international watercourses.¹²⁶ Slovakia, nevertheless, argues that the goal of the negotiations is to adhere to the objective of the 1977 Treaty, which is still in force, and this implies that Hungary is not released from the obligation to construct the dam in order to fulfill the objective of the 1977 Treaty, although the Court expressly held that ‘there is no longer any point in building it’.¹²⁷ This situation seems to arise from a reluctance of Slovakia to accept the legality of this statement.¹²⁸ Still, the parties have been trying to negotiate in order to find a way out but the problem is still unresolved. Also, a solution on the matter of the amount of water to be discharged back into the riverbed remains to be achieved.¹²⁹ The present situation is far from what the Court asked the parties to do, since the Court held that ‘the joint régime should be restored’¹³⁰ but Slovakia is the only State that operates the dam. Szabó states that ‘it seems that the parties are very close to realising that they have exhausted all possibilities and that they will inevitably have to ask for assistance from a third party. The obvious solution would be to return to the ICJ to ask for an additional judgment’.¹³¹

The ICJ did not settle the dispute in the sense that its judgment is not clear enough, so that this has allowed the parties to interpret the judgment in different ways.¹³² There was also Slovakia’s request for an additional judgment in 1998 with a view to execute the judgment and that the case remains pending.¹³³

(3) The *Pulp Mills* case

In the *Pulp Mills* case between Argentina and Uruguay, the key issue was Argentina’s allegation that the construction of pulp mills by Uruguay was a breach of the obligations contained in the 1975 Statute of the River Uruguay to prevent pollution and provide protection of the quality of the waters of the River Uruguay and its

¹²⁶ Ibid.

¹²⁷ See *Gabčíkovo-Nagymaros case*, para. 134. See also Szabó (n 125) 99-100.

¹²⁸ Ibid, 99.

¹²⁹ Hungary Today, ‘LMP: Gabčíkovo-Nagymaros Dams Should Be Back on Agenda’ (3 November 2014) <<http://hungarytoday.hu/news/43312-2-lmp-gabcikovo-nagymaros-dams-should-be-back-on-agenda-69944>> accessed 27 May 2015>.

¹³⁰ *Gabčíkovo-Nagymaros case*, para. 144.

¹³¹ Szabó (n 125) 101.

¹³² For positive assessment, see Constanze Schulte, *Compliance with Decisions of the International Court of Justice* (OUP 2004) 248-249.

¹³³ ICJ Press Release 1998/28, Slovakia Requested an Additional Judgment (3 September 1998), available at <<http://www.icj-cij.org/docket/index.php?pr=268&p1=3&p2=1&case=92&p3=6>> accessed 19 June 2016.

ecosystem. The Court held that Uruguay had breached the procedural obligations under Article 7 to 12 of the Statute of informing, notifying and negotiating, but it had not breached the substantive obligations contained therein. The judgment did not specify the concrete measures required to implement the judgment or to prevent ecological deterioration of the River Uruguay but merely declared the breach of Uruguay and, consequently, that appropriate satisfaction had been established.¹³⁴

After the ICJ delivered its decision, the parties signed an agreement that ended the several years long dispute between them.¹³⁵ It seems that the ICJ contributed to the settlement of the dispute judgment and influenced the content of the agreement. This is because soon after the decision was rendered, the presidents of the two States decided to establish a monitoring plan for the Orion mill *as stated in the judgment*.¹³⁶ Also, a scientific committee was established to monitor the River Uruguay.¹³⁷ There is a compulsory requirement that a State wishing to carry out any activity shall consult with the Administrative Commission of the River Uruguay (CARU) before making any decision with a view to controlling and preventing the pollution of the River Uruguay.¹³⁸ It is clear that the parties complied with the judgment considering the Agreement establishing this committee which makes a reference to the ICJ judgment.¹³⁹ After that, in 2011, the presidents signed the Declaration of Buenos Aires adopting the report submitted by the scientific committee which, considering the various attempts of the parties to negotiate and implement the judgment, marked the end of the dispute between them.¹⁴⁰ Recently, Uruguay has authorised an increase in the plant's production which then provoked strong opposition over this issue from the Argentinian president, stating that this action 'affects the environmental sovereignty of Argentina, violates treaties between the two nations, as well as the Hague's own rulings.'¹⁴¹ If Argentina had been properly informed, notified and

¹³⁴ *Pulp Mills* case, para. 282.

¹³⁵ Pablo Sandonato de León, 'Diplomatic and Judicial Means of Dispute Settlement and How They Got Along in the Pulp Mills Case' in Laurence Boisson de Chazournes, Marcelo Kohen and Orrego Vicuña (eds), *Diplomatic and Judicial Means of Dispute Settlement* (Martinus Nijhoff Publishers 2012)

¹³⁶ See the details in *ibid*, 84 especially in footnote 58.

¹³⁷ *Ibid*, 84-85.

¹³⁸ MercoPress, 'Mujica and CFK Announce Agreement to Jointly Monitor the River Uruguay' (Montevideo, 29 July 2010) <<http://en.mercopress.com/2010/07/29/mujica-and-cfk-announce-agreement-to-jointly-monitor-the-river-uruguay>> accessed 1 June 2016.

¹³⁹ de León (n 135) 85

¹⁴⁰ *Ibid*, 85.

¹⁴¹ Buenos Aires Herald, 'Argentina Takes Botnia Pulp Mill Dispute to the Hague' (Argentina, 2 October 2013) <<http://www.buenosairesherald.com/article/142005/argentina-takes-botnia-pulp-mill-dispute-to-the-hague>> accessed 1 June 2016.

consulted by Uruguay in relation to the increase of the plant's production, the new dispute between the parties would not have arisen and this suggests that the ICJ was not successful in changing States' behaviour so discourage future violations and deter the emergence of future disputes.

(4) The *Whaling* case

In the *Whaling* case between Japan and Australia, the central issue revolved around the conduct of Japan in carrying out a scientific research programme called JARPA II, which Australia claimed that Japan failed to comply with its obligations set out in the ICRW Convention. The key issue of the case has been settled by the ICJ after it delivered the judgment, in favour of Australia, that interpreted the conduct of Japan as a violation of Article VIII paragraph 1 of the ICRW Convention, because JARPA II is not a programme for the purpose of scientific research, considered in terms of the programme's design and implementation.¹⁴² After the judgment had been delivered, on 18 April 2014, Japan adopted a policy relating to future whale research programmes and it stated that it would comply with the judgment by cancelling the second phase of the JARPA II in the Antarctic.¹⁴³ Japan's stance reflects the direct influence of the Judgment and this shows the effect which it has had upon Japan's internal policy. In addition, there were the chains of events which seemed to imply that Japan was willing to comply with the wider spirit of the judgment. In Japan's opening Statement to the 65th Meeting of the IWC, it revealed its intention to submit a new research plan in the season 2015/2016 based upon international law and scientific evidence to the Scientific Committee of the International Whaling Commission

¹⁴² *Whaling* case, para. 227. See generally in Dai Tamada, 'On the Way to Definitive Settlement of Dispute: Lessons from the Whaling Case' (2014) 32 Australian Ybk Intl L 113, 113-115.

¹⁴³ Government of Japan, 'Policy towards the Future Whale Research Programs Statement by Minister for Agriculture, Forestry and Fisheries, the Government of Japan' (18 April 2014), available at <<http://www.jfa.maff.go.jp/e/pdf/danwa.pdf>> accessed 1 June 2016. See also Japan's position just after the judgment was rendered on 31 March 2014 that it will comply with the Judgment, Ministry of Foreign Affairs of Japan, 'Remarks by the Agent of Japan, Koji Tsuruoka' (31 March 2014) available at <http://www.mofa.go.jp/ecm/fsh/page2e_000012.html> accessed 1 June 2016; Ministry of Foreign Affairs of Japan 'Press Conference by Foreign Minister Fumio Kishida, Tuesday, April 1, 2014, 8:39 a.m. Front Entrance Hall, Prime Minister's Office' available at <http://www.mofa.go.jp/press/kaiken/kaiken4e_000059.html> accessed 1 June 2016. See for Australian side, Australian Government, Attorney-General's Department, 'Whaling in the Antarctic Litigation' available at <<http://www.ag.gov.au/Internationalrelations/InternationalLaw/Pages/WhalingintheAntarcticLitigation.aspx>> accessed 1 June 2016 for New Zealand side see Murray McCully, 'ICJ Decision Harpoons 'Scientific' Whaling' (31 March 2014) available at <<http://www.beehive.govt.nz/release/icj-decision-harpoons-'scientific'-whaling>> accessed 1 June 2016.

(IWC) by the autumn of 2014, which reflected the criteria mentioned in the Judgment.¹⁴⁴ In this regard, it would also reduce the number of whales to be taken in the Antarctic.¹⁴⁵ Therefore, the annual sample size for Antarctic minke whales would be reduced from 935 to 333.¹⁴⁶ Nevertheless, the revised plan was commented on by the international panel of experts (the Review Panel), who stated that not enough information to determine whether lethal sampling is necessary to achieve the objectives of improving the precision of biological and ecological information related to the Antarctic minke whales and of improving the understanding of the Antarctic marine ecosystem.¹⁴⁷ It recommended that the programme should be further improved.¹⁴⁸

With regard to behaviour changes, it seems that Japan has not changed its behaviour, since it has not ceased scientific whaling in the Antarctic by the use of methods that require the killing of a considerable number of whales. In this sense, future violations of the Treaty could occur. The fact that recently Japan, after the ICJ had rendered the judgment of the *Whaling* case, made a reservation on any dispute arising out of, concerning, or relating to research on, or conservation, management or exploitation of, living resources of the sea supports this point. Thus, the ICJ will not have a jurisdiction over the future whale research program or any fisheries conservation disputes in relation to living resources which Japan intend to carry out in the same area again.¹⁴⁹

¹⁴⁴ See Minister for Agriculture, Forestry and Fisheries, ‘Japan’s Opening Statement to the 65th Meeting of the International Whaling Commission’ IWC 65/OS Japan, available at <https://archive.iwc.int/pages/terms.php?ref=3545&search=%21collection104&k=&url=pages%2Fdownload_progress.php%3Fref%3D3545%26size%3D%26ext%3Dpdf%26k%3D%26search%3D%2521collection104%26offset%3D0%26archive%3D0%26sort%3DDDESC%26order_by%3Drelevance> accessed 1 June 2016.

¹⁴⁵ See the details about this new programme in, The Government of Japan, ‘Proposed Research Plan for New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A)’, available at <<http://www.jfa.maff.go.jp/j/whale/pdf/newrep--a.pdf>> accessed 1 June 2016.

See also The Japan Times, ‘Japan to Hunt Antarctic Whales, But Cut Catch Target by Two-Thirds’ <<http://www.japantimes.co.jp/news/2014/11/18/national/japan-to-hunt-antarctic-whales-but-cut-catch-target-by-two-thirds/#.VGtCo4d3aV4>> accessed 1 June 2016.

¹⁴⁶ Ibid.

¹⁴⁷ See IWC, Report of the Expert Panel to Review the Proposal by Japan for NEWREP-A, 7-10 February 2015, Tokyo, Japan, SC/66aRep/6, 6-7, available at <<https://www.documentcloud.org/documents/1873824-sc-66a-rep-6.html>> accessed 1 June 2016.

¹⁴⁸ Ibid.

¹⁴⁹ See for more details at <https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=I-4&chapter=1&lang=en#EndDec> accessed 17 June 2016.

(5) The *Certain Activities/Construction of the Road* cases

The *Certain Activities/Construction of the Road* cases are the most recent judgment of the ICJ. It held that Nicaragua did not breach procedural environmental obligations to carry out an EIA, notify and consult as well as substantive obligations not to cause any transboundary harm because the dredging programme carried no risk of significant transboundary harm with respect to the flow of the Colorado River or to Costa Rica's wetland. On the contrary, the ICJ decided the construction of the road along the San Juan River by Costa Rica caused a risk of significant transboundary harm. Hence, by failing to carry out an EIA before commencing the project, Costa Rica had breached its procedural obligation. What the ICJ requested Costa Rica to do was to prepare an appropriate EIA for any further works in the border area if they carried a risk of significant harm. Moreover, the ICJ considered that Costa Rica would have to consult in good faith with Nicaragua to determine measures to prevent or minimise significant transboundary harm. For the substantive obligation, the Court concluded that Costa Rica did not breach substantive obligations such as increasing the sediment level of the River, causing significant harm to the river's ecosystem and water quality. Finally, the Court expected that Costa Rica would continue its due diligence obligation to monitor the effects on the environment and the mitigation works for reducing the adverse effects of the construction project on the environment. At the time of writing, it is too early to appraise Costa Rica's actions in responding to the judgement in order to test the effectiveness of the ICJ. It remains to be seen Costa Rica's policy on this matter to see whether it would conduct an EIA for the future project or how far it could strengthen cooperation with Nicaragua so as to prevent adverse impact to the environment.

To sum up briefly: the experiences of the ICJ indicates that in three (the 1974 *Nuclear Tests* case, *Pulp Mills* case and *Whaling* case) of the five cases examined the ICJ settled the dispute brought before it (the exception being the *Gabčíkovo-Nagymaros* case, and in the *Certain Activities/Construction of the Road* cases, it is too soon to say what the impact of the Court's judgment will be). However, in the *Pulp Mills* and *Whaling* cases the Court has failed to influence the parties' behaviour in complying with the wider spirit of the judgments. Thus, in the *Pulp Mills* case, a new dispute seems to have arisen although the parties had signed the agreement after the judgment was rendered. As for the *Whaling* case, at first, Japan agreed to comply with

the judgment by cancelling the JARPA II programme, but it has not abandoned scientific whaling by the use of methods that require the killing of a large number of whales and later it made a reservation on the dispute concerning scientific research so the jurisdiction of the ICJ would be precluded for the future case. Thus, the ICJ could halt the disputes temporarily but it could not guarantee compliance with the wider spirit of its judgments.

2.1.4.2 The International Tribunal for the Law of the Sea (ITLOS)

It should be noted from the outset that ITLOS has yet to give a decision on the merits in an environmental case. All the cases that will be discussed here are provisional measures orders under Article 290(5) of UNCLOS made pending constitution of the Annex VII tribunal. In addition, it is not the role of the ITLOS in a provisional measure order to settle a dispute but the prescription of provisional measures is a significant tool to respond to international environmental disputes in a timely manner¹⁵⁰ and prevent serious harm to the marine environment pending the final decision.¹⁵¹ Thus, it is worthwhile to consider the ways in which the ITLOS contributed to the settlement of the dispute even though that was not their function at this stage.

(1) The *Southern Bluefin Tuna* cases

In the *Southern Bluefin Tuna* cases, the provisional measures were granted by the ITLOS in 27 August 1999, where the key points of these measures were that of the limitation of annual catches in which all three parties — Australia, Japan and New Zealand — had to ensure that their catches would not exceed the annual national allocation at the levels which were agreed by the Commission for the Conservation of Southern Bluefin Tuna of 5,265 tonnes for Australia, 6,065 tonnes for Japan and 420 tonnes for New Zealand.¹⁵² In addition, the ITLOS requested all the parties to refrain from conducting an experimental fishing programme.¹⁵³

After the provisional measures were issued, the parties held negotiations to find a way out which seemed to display ‘a positive and constructive atmosphere and reflected the desire of the three parties to the Commission to move from the previous

¹⁵⁰ Tim Stephens, *International Courts and Environmental Protection* (CUP 2009), 44-45.

¹⁵¹ See Art. 290 (1) of UNCLOS.

¹⁵² *Southern Bluefin Tuna* case, para. 90 (1) (c).

¹⁵³ Ibid, para. 90 (1) (d).

period of difficulty to a period of co-operation'.¹⁵⁴ It was reported that, in the 1999 fishing season (1 March 1999 - 29 February 2000), Japan decreased the upper limit of catch by taking voluntary measures to limit the catch to 6,065 tonnes so as to comply with the ITLOS's provisional measures.¹⁵⁵ However, the actual catch was 5,354 tonnes.¹⁵⁶ In the 2000 fishing season (1 March 2000-29 February 2001), Japan further decreased the upper limit of catch from 6,065 to 4,578 tonnes, but this limit was later amended to the previous limit after the Arbitral Tribunal revoked the provisional measures so as to bring the actual catch to 6,027 tonnes.¹⁵⁷ Australia also complied with the provisional measures, since the catch in the 1999 and 2000 seasons were 5,257 and 5,160 tonnes, respectively.¹⁵⁸ In New Zealand the total catch did not exceed the level of 420 tonnes and did not engage in an experimental fishing programme, as required by the provisional measures.¹⁵⁹ Considering the above information with regard to the amount of southern bluefin tuna caught by those three parties, the conclusion can be drawn that the provisional measures to certain extent managed to preserve against serious harm to the environment. The case was then preceded to the Arbitral Tribunal which found that it did not have the jurisdiction to rule in the case.

The outcome of this case seemed to bring back a good atmosphere in which the parties could be induced to negotiate and cooperate in order to normalise their relations.¹⁶⁰ For its part, New Zealand opined that 'by bringing this case...have caused a greater readiness on Japan's part to improve the scientific basis of any future joint experimental fishing programme and to reduce the tonnage that would be taken

¹⁵⁴ CCSBT, Report of the Sixth Annual Meeting: First Part, New Zealand Opening Statement CCSBT6(1) 29-30 November 1999, available at <http://www.ccsbt.org/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_06/report_of_ccsbt6_Part1.pdf> accessed 19 June 2016.

¹⁵⁵ CCSBT, Report of the Seventh Annual Meeting of the Commission 18 - 21 April 2001, Review of Southern Bluefin Tuna Fisheries of Japan in 1999 Fishing Season, available at <http://www.ccsbt.org/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_07/report_of_ccsbt7.pdf> accessed 19 June 2016.

¹⁵⁶ Ibid.

¹⁵⁷ Ibid, Review of Southern Bluefin Tuna Fisheries of Japan in the 2000 Fishing Season.

¹⁵⁸ Ibid, Review of the Australian Southern Bluefin Tuna Fishery for the 1999/00 and the Preliminary 2000/01 Seasons Prepared by Carolyn Robins, BRS (10 April 2001).

¹⁵⁹ Ibid, Review of New Zealand SBT Fisheries for CCSBT-7.

¹⁶⁰ Bill Mansfield, 'Compulsory Dispute Settlement after the Southern Bluefin Tuna Award' in Alex G. Oude Elferink and Donald R. Rothwell (eds), *Oceans Management in the 21st Century: Institutional Frameworks and Responses* (Martinus Nijhoff 2004) 259-261 and 263-269; Tim Stephens, 'The Limits of International Adjudication in International Environmental Law: Another Perspective on the Southern Bluefin Tuna Case' (2004) 19 IJML 177, 183-187; Shabtai Rosenne, 'Arbitrations under Annex VII of the United Nations Convention on the Law of the Sea' in Tafsir Malick Ndiaye, Rüdiger Wolfrum and Chie Kojima (eds), *Law of the Sea, Environmental Law, and Settlement of Disputes: Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff Publisher 2007) 998.

if such a programme were to be agreed.¹⁶¹ Australia insisted in its positions that experimental fishing programmes should not be conducted unilaterally and that it would try to settle the dispute amicably for the purpose of conservation and optimum utilisation of the Southern Bluefin Tuna stock.¹⁶² For Japan, it took the view that the award ‘urges self-restraint upon the parties, promotion of negotiations, and the utilization of an independent third party (a tribunal constituted under the CCSBT) for that purpose’¹⁶³ and it pledged to establish a comprehensive conservation regime which includes third parties such as the Republic of Korea and Taiwan.¹⁶⁴

All the positions presented by the parties which seemed to be ‘positive elements of the litigation process’ led Shabtai Rosenne to draw the conclusion that ‘there is no doubt that those promising expectations of the parties were the direct outcome of the carefully crafted provisions in the Award that related to the provisional measures prescribed by ITLOS’.¹⁶⁵

The dispute was not completely settled until 28 May 2001, when Australia announced the end of the dispute, resulting in the cancellation of sanctions imposed by Australia prohibiting Japanese fishing vessels to enter in its waters since 1998¹⁶⁶ and the establishment of a scientific programme endorsed by the Commission for the Conservation of Southern Bluefin Tuna so as to replace the Japanese experimental fishing programme.¹⁶⁷

¹⁶¹ New Zealand Government, Hon Phil Goff Minister of Foreign Affairs and Trade, ‘Tuna Case has Brought Progress’ (Scoop Independent News, 8 August 2000)

<<http://www.scoop.co.nz/stories/PA0008/S00151.htm>> accessed 19 June 2016.

¹⁶² Australian Government, ‘Southern Bluefin Tuna Case’, (Scoop Independent News, 7 August 2000)

<<http://www.scoop.co.nz/stories/WO0008/S00030.htm>> accessed 19 June 2016.

¹⁶³ Minister of Foreign Affairs of Japan, ‘Statement by Foreign Minister Yohei Kono on the Award on Jurisdiction and Admissibility on the Southern Bluefin Tuna Case rendered by the Arbitral Tribunal constituted under Annex VII of the United Nations Convention on the Law of the Sea’ (7 August 2000) available at <<http://www.mofa.go.jp/announce/announce/2000/8/807.html>> accessed 19 June 2016.

¹⁶⁴ Ibid.

¹⁶⁵ Shabtai Rosenne, ‘Settlement of Disputes, A Linchpin of the Convention: Reflections on fishery Management Disputes’ in DOALOS (ed), *Proceedings of the Twentieth Anniversary Commemoration of the Opening for Signature of the United Nations Convention on the Law of the Sea, New York, 9 and 10 December 2002* (UN 2003) 142.

¹⁶⁶ Japan Weekly Monitor, ‘Australia Ends Ban on Japanese Tuna Boats’ (4 June 2001) available at <<http://www.thefreelibrary.com/Australia+ends+ban+on+Japanese+tuna+boats.-a075332331>> accessed 19 June 2016.

¹⁶⁷ Government of Australia, ‘Tuckey Announces End to Southern Bluefin Tuna Dispute with Japan’, The Hon Wilson Tuckey MP, Former Minister for Forestry and Conservation, Media release AFFA01/42TU, 28 May 2001 cited in Rosenne (n 165) 142, footnote 114. See also Stephen Bouwhuis, ‘Country/Region Report: Australia’ (2001) 12 YIEL 574, 575.

(2) The *MOX Plant* case

In the *MOX Plant* case which started life in the ITLOS, provisional measures were sought by Ireland pending the establishment of an arbitral tribunal under Annex VII to UNCLOS. The ITLOS ordered the parties to cooperate and enter into consultations so that the parties could exchange information with regard to the consequences of the commission of the MOX plant, to monitor risks and the effects of the operation and to devise measures to prevent the pollution of the marine environment.¹⁶⁸ To show their intention to comply with the order, on 17 December, the UK submitted the initial report to the ITLOS and Ireland in order to inform them of the steps that the UK had taken.¹⁶⁹

Given that fact that, in the arbitral proceedings, the parties still disputed the question of whether or not the cooperation between the parties had been enhanced, the issue of the parties' compliance with the Order cannot be promptly answered without considering the stances of both parties and the arbitral award. While the UK alleged that it proposed to review the existing arrangements for cooperation and monitoring but 'Ireland has not yet to respond',¹⁷⁰ Ireland rebutted this allegation by contending that what the UK claimed may be defined as 'a gross misinterpretation of the facts' in order to discredit Ireland.¹⁷¹ In fact, the parties have attempted to restore their cooperation since the ITLOS Order was made. Several meetings and public consultations were held and sensitive security information as well as reports relevant to the operation of the MOX Plant were provided by the UK.¹⁷² What can be seen as the aftermath of the ITLOS order was that, at least, the cooperation between Ireland and the UK had actually been improved. As Ireland stated in the Reply submitted to the Arbitral Tribunal¹⁷³ and it confirmed in the Order N° 3 of the Arbitral Tribunal that 'there had been some improvement in the processes of co-operation and the provision of information'.¹⁷⁴ Furthermore, these improvements can be considered as being a direct consequence of the ITLOS Order in which the Arbitral Tribunal

¹⁶⁸ *MOX Plant* case, para. 89.

¹⁶⁹ HC Deb 18 December 2001, Vol 377, Cols 259-260W, available at <<http://www.publications.parliament.uk/pa/cm200102/cmhansrd/vo011218/text/11218w23.htm>> accessed 19 June 2016.

¹⁷⁰ *MOX Plant* case, Counter Memorial of the UK, 9 January 2003, para. 6.4. See also paras. 6.83-6.84.

¹⁷¹ *MOX Plant* case, Reply of Ireland, Vol 1, 7 March 2003, 7.64.

¹⁷² See the details of what the UK had done following the ITLOS Order in the oral presentation by Richard Plender, Transcripts of Hearing, Day 8, 21 June 2003, 13-15.

¹⁷³ Order N° 3, Suspension of Proceedings of Jurisdiction and Merits, and Request for Further Provisional Measures, 24 June 2003, para. 65.

¹⁷⁴ *Ibid*, para. 65.

accepted that ‘it is satisfied that since December 2001, there has been an increased measure of co-operation and consultation, as required by the ITLOS Order.’¹⁷⁵ It should be noted, however, that the MOX Plant never began to operate so the need for co-operation became largely academic.

(3) The *Land Reclamation* case

In the *Land Reclamation* case, the ITLOS prescribed provisional measures which required both parties to cooperate with each other by establishing a group of independent experts for the purpose of conducting a study with regard to the effects of Singapore’s land reclamation works and proposing measures to deal with any adverse effects. In addition, the parties shall exchange information on Singapore’s land reclamation works, including assessing the risks or effects of such works. It should be noted that the ITLOS did not grant the provisional measures as Malaysia had requested, so as to make Singapore academics view the outcome as a ‘victory for Singapore’.¹⁷⁶ Later, the Group of Experts (GOE) was formed and it submitted the report to both Governments on 5 November 2004 with a view to responding to what the ITLOS held in the provisional measures, in which it found that the work had not caused any serious impact.¹⁷⁷ The report was accepted by both States and it seemed that the process of negotiation, on the basis of the findings of the GOE, to settle the dispute went quite very well and was conducted in a spirit of goodwill. This was, as was accepted by the Singapore Foreign Minister, partly because of ‘the involvement of an objective third party—ITLOS...—which made possible an impartial and objective assessment of the facts of the case and the merits of the competing arguments.’¹⁷⁸ The dispute was successfully settled, without the need of the Annex VII arbitral Tribunal to deal with the merits, after the provisional measures had been

¹⁷⁵ Ibid, para. 66.

¹⁷⁶ Tommy Koh and Jolene Lin, ‘The Land Reclamation Case: Thoughts and Reflections’ (2006) 10 Singapore Ybk Intl L 1, 4. One of the Malaysian requests before the ITLOS for granting provisional measures was that Singapore shall suspend all current land reclamation activities in the vicinity of the maritime boundary between the two States or of areas claimed as territorial waters by Malaysia; see in the Request for Provisional Measures Submitted by Malaysia

¹⁷⁷ See Report of the Group of Independent Experts (GOE) in the matter of the ITLOS Order of 8 October 2003 (5 November 2004), available at <http://www.mfa.gov.sg/content/mfa/media_centre/press_room/if/2005/200501/infocus_20050114_03.html> accessed 19 June 2016.

¹⁷⁸ See the Joint Press Statement in Ministry of Foreign Affairs of Singapore, ‘Remarks In Parliament By Singapore Foreign Minister George Yeo On The Settlement Agreement Between Singapore and Malaysia On Land Reclamation’ (16 May 2005), available at <https://www.mfa.gov.sg/content/mfa/media_centre/special_events/pedrabranca/resource_center/remarks_in_parliament/2005/200505/press_200505_1.html> accessed 19 June 2016.

prescribed, culminating in the conclusion of the agreement between the parties which was signed on 26 April 2005.¹⁷⁹ The evidence signifying that the dispute was resolved appeared in paragraph 13 of the agreement, where the parties concluded that the agreement 'is a full and definitive settlement of the dispute with respect to the land reclamation and all other issues related thereto.'¹⁸⁰ In the said agreement, the parties complied with the provisional measures in that they also agreed to expand the mandate of the bilateral cooperation programme, the so-called Malaysia-Singapore Joint Committee on the Environment (MSJCE), so as to include the exchange information with regard to the environment in the Straits of Johor and to monitor the ecological conditions.¹⁸¹

It is not an exaggeration to conclude that the provisional measures had a direct impact on the ways in which the parties carried out further negotiations to find practical solutions to the dispute, as Wolfrum noted that the provisional measures were 'instrumental in bringing the parties together and providing a successful diplomatic solution to the dispute'.¹⁸² In addition, by requesting the parties to cooperate, the ITLOS adopted a 'pragmatic approach'¹⁸³ which 'would assist the parties in finding a solution.'¹⁸⁴ It can be concluded that the effectiveness of the ITLOS in settling this case is evident, which leads Koh (then an Agent for Singapore) and Lin to draw the lessons learnt from the case with regard to the trustworthiness of the ITLOS that these 'third-party processes...are very useful tools to break impasses and to bring disputes to an amicable resolution. Often, the parties themselves would have politicised the dispute to the extent that it is difficult for either party to step back or compromise without third-party intervention.'¹⁸⁵

¹⁷⁹ See *Land Reclamation* case, 140. See also Transcript of Press Conference by Professor Tommy Koh, Agent of the Government of Singapore for the Reclamation Issue and Mrs Cheong Koon Hean, Deputy Secretary (Special Duties), Ministry Of National Development at the MFA, (29 April 2005) <http://www.mfa.gov.sg/content/mfa/media_centre/press_room/tr/2005/200504/transcript_20050429.html> accessed 19 June 2016.

¹⁸⁰ Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia v Singapore)—Settlement Agreement (with map) (entered into force 26 April 2005) 2324 UNTS 23.

¹⁸¹ Ibid, para. 9 under the heading 'Joint Mechanisms'.

¹⁸² ITLOS, Statement by Rüdiger Wolfrum, President of the International Tribunal for the Law of the Sea, to the Informal Meeting of Legal Advisers of Ministries of Foreign Affairs New York, 24 October 2005, 6, available at

<https://www.itlos.org/fileadmin/itlos/documents/statements_of_president/wolfrum/legal_advisors_241005_eng.pdf> accessed 19 June 2016.

¹⁸³ Ibid, 7.

¹⁸⁴ Ibid, 7.

¹⁸⁵ Koh and Lin (n 176) 6.

Considering whether the parties have changed their behaviour after the dispute ended, what one might find is that the obligations to inform, notify and consult have been strengthened. Recently, two of Malaysia's land reclamation works ignited environmental concerns on Singapore's side. Malaysia has indicated that it would share some information about the works, including EIAs with Singapore, and has promised to commit to 'fulfilling its obligations under international law and will take all necessary measures to avoid any adverse transboundary impact'.¹⁸⁶ This situation has demonstrated that, at very least, Malaysia has been aware that, in a case where the projects could have a significant impact on the environment, the projects should not be carried out unilaterally but that consultation needs to be carried out and relevant information should be shared, although, at the time of writing, Singapore has not yet received such EIAs and the process of consultation is still ongoing.¹⁸⁷

2.1.5 Non-Compliance Procedures

2.1.5.1 The Disputes under the Espoo Convention

The discussion below will be confined to two cases that are the *Romania v. Ukraine* case and the *Lithuania v. Belarus* case because in these cases the Committee found that Ukraine and Belarus were in non-compliance. The other three cases, the *Ukraine v. Romania*, the *Azerbaijan v. Armenia* and the *Armenia v. Azerbaijan* case,¹⁸⁸ have been closed, since the Committee found that they were not in non-compliance and, therefore, the issue of compliance and behavioral changes does not arise.

(1) The *Romania v. Ukraine* case

Having found that Ukraine had breached its obligations under the Espoo Convention, the Implementation Committee (IC) urged, *inter alia*, Ukraine to stop work of the project, repeal without delay the final decision concerning the implementation of the project and not to implement Phase II of the project until it fully complied with the

¹⁸⁶ See MFA Press Release: Transcript of Senior Minister of State for Foreign Affairs Masagos Zulkifli's Reply to Parliamentary Questions, 9 July 2014, available at <http://www.mfa.gov.sg/content/mfa/media_centre/press_room/pr/2014/201407/press_20140709.printable.html?status=1> accessed 19 June 2016.

¹⁸⁷ MFA Press Release: Transcript of Second Minister for Foreign Affairs Grace Fu's Reply to the Parliamentary Question and Supplementary Questions, 19 January 2015, available at <http://www.mfa.gov.sg/content/mfa/media_centre/press_room/pr/2015/201501/press_20150120.printable.html?status=1> accessed 19 June 2016.

¹⁸⁸ See chapter 3, section 3.2.1.

Convention.¹⁸⁹ The findings of the IC received a positive response from Ukraine when it decided to repeal the final decision, as urged by the IC, and further steps to comply with the Convention were also proposed which the IC appreciated as an important step for future compliance.¹⁹⁰ It is important to note that although some obligations were fulfilled, some were not such as the domestic legislative frameworks. Rather than leaving Ukraine to bring its legislation into line with the Convention alone, the MOPs offered technical advice to Ukraine.¹⁹¹ At the time of writing the MOPs was still requesting Ukraine to bring the project into full compliance with the Convention by the end of 2015 and also requested it to cooperate and consult with Romania, as well as encouraging the two States to develop bilateral agreement for improving implementation of the Convention.¹⁹²

(2) The *Lithuania v. Belarus* case

The central issue of this case was whether Belarus had breach its obligations with regard to the EIA procedure under the Convention. The Committee found that Belarus was in non-compliance with its obligations under Article 2 (6), Article 4 (2), Article 5 (a) and Article 6 (1) (2) of the Convention. The MOP adopted several measures and requested Belarus to, *inter alia*, complete the EIA procedures such as ensuring that due account has been taken of the outcome of the EIA documentation, providing to Lithuania the final decision on the proposed activity and continuing the procedure of transboundary EIA on the basis of the final EIA documentation.¹⁹³ After the recommendations were proposed, a number of developments took place and bilateral dialogue have been exhausted which signified that Belarus attempted to comply with

¹⁸⁹ Report of the MOPs to the Espoo Convention, ECE/MP.EIA/10 (28 July 2008) Decision IV/2 para.10.

¹⁹⁰ See Report of the Government of Ukraine on the Implementation of Decision IV/2 of Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), adopted on the 4th Meeting of Parties to the Convention held on 19-21st May, 2008 in Bucharest, reprinted at

<http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.1/Report_of_Ukraine_Danube-Black%20Sea_Oct08_main.pdf> accessed 19 June 2016.

¹⁹¹ Report by the MOPs at Fifth Session (Decision V/4 on Review of Compliance) para. 26, available at <<http://www.unece.org/fileadmin/DAM/env/documents/2011/eia/decision.V.4.e.pdf>> accessed 19 June 2016.

¹⁹² Meeting of the Parties at Sixth Session (Geneva, 2-5 June 2014) Decision on Review of Compliance (Decision VI/2) para. 27,

<http://www.unece.org/fileadmin/DAM/env/eia/decisions/Decision_VI.2.pdf> accessed 19 June 2016.

¹⁹³ Decision VI/2, Part III/C, ECE/MP.EIA/2014/L.3 (21 March 2014), paras. 48-64

the recommendation.¹⁹⁴ But the dispute was not completely settled judging from the facts that some issues need to be further implemented, since they were neglected by Belarus, such as update of the EIA report, co-arrangement of public hearings in Lithuania.¹⁹⁵ Also, the parties still disagreed on scientific and technical details about the implementation of the recommendations. Lithuania expressed its grave concern about, for example, the lack of substance in the EIA documentation provided by Belarus and methodology used in determining the siting.¹⁹⁶ Recently, the Committee proposed that the parties should establish a joint expert commission to assess Belarus compliance with the Convention since the Committee, in this specific case, did not have sufficient technical and scientific knowledge to do so.¹⁹⁷ While Lithuania was in favorable toward the proposal, Belarus disagreed with the establishment of this kind of joint commission claiming that it would unlikely be resultative, in part because of the ground reason of the mistrust forming between them and it preferred to exhaust all possible avenues through bilateral consultations.¹⁹⁸ Since the dispute is still ongoing, it remains to be seen how the issue could be settled.

2.1.5.2 The Dispute under the Aarhus Convention

The dispute over the Bystroe Canal project, in which Romania alleged that Ukraine had breached the Convention was decided by the Committee in 2005.¹⁹⁹ Having found that there was a breach of Article 6 (2) (e) of the Convention by Ukraine, the CC

¹⁹⁴ The Ministry of Environment of the Republic of Lithuania, 'Report on Steps Taken by Lithuania in Regard to the Implementation of the Findings and Recommendations of the Espoo Convention Implementation Committee' (21 November 2014), available at <http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/frLithuania24Nov2014/21-11-2014_letter.pdf> accessed 19 June 2016.

¹⁹⁵ Ibid.

¹⁹⁶ The Ministry of Environment of the Republic of Lithuania, 'Regarding Follow-Up Decision VI/2 of the Meeting of the Parties' (18 January 2016), available at <http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/2016_forIC35/IC34Lithuania18012016.pdf> accessed 19 June 2016.

¹⁹⁷ Implementation Committee of the Espoo Convention (16 December 2015), available at <http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/2016_forIC35/Letter_to_Belarus_VI.2_followup_IC34_rev.pdf> accessed 19 June 2016.

¹⁹⁸ See the Speech of the Head of Belarusian Delegation, First Deputy Minister of Natural Resources and Environmental Protection of the Republic of Belarus Mrs. Iya Malkina at the 35th session of the Implementation Committee of the Espoo Convention (31 March 2016), available at <<http://minpriroda.gov.by/en/news-en/view/speech-of-the-head-of-belarusian-delegation-first-deputy-minister-of-natural-resources-and-environmental-1832/>> accessed 19 June 2016. See also Report of the Implementation Committee on its Thirty-Fifth Session, ECE/MP.EIA/IC/2016/2, Annex (12 May 2016), para. 20.

¹⁹⁹ MOPs to the Aarhus Convention, Report of the Second Meeting, Decision II/5b, (13 June 2015), available at <<http://www.unece.org/fileadmin/DAM/env/documents/2005/pp/ece/ece.mp.pp.2005.2.add.8.e.pdf>> accessed 19 June 2016.

requested Ukraine to modify its domestic law so as to comply with its international obligation. The follow up decisions adopted by the MOPs from 2005 to present, show a slow progress of implementation of the MOP's decision although Ukraine shows its willingness to rectify its legislation and practice.²⁰⁰ For this reason, the MOPs requested the secretariat and the Compliance Committee, as well as invited international and regional organisations and financial institutions, to provide advice and assistance to Ukraine for implementing the measures.²⁰¹ As reported in the Fourth and Fifth Meeting of MOPs in 2011 and 2014, the situation of non-compliance had not improved, since 'no real and efficient steps have been taken'²⁰² and Ukraine remains in non-compliance up until the present.²⁰³

After surveying the compliance of the parties to selected NCPs, some tentative assessments can be made. The main type of dispute brought before NCPs involved practices of parties in implementing international obligations set out in particular conventions into their domestic law. From the experience reviewed, when compliance committees make a recommendation it seems that parties are receptive to the findings in the sense that the parties usually show their willingness to comply with the recommendation. However, the willingness to comply and their ability to achieve what compliance committees have recommended need to be distinguished. In all cases described above, the non-complying States have not achieved full-compliance. One of the advantages of NCP is that an NCP body still monitors implementation of the non-complying party on a regular basis by adopting follow-up decisions until the parties concerned have fulfilled their obligations. Also, a NCP plays an active role in finding further solutions in the case where there have been a matters of further disagreement between them, for instance, by proposing the establishment of an expert commission to assess compliance of the losing State as shown in the dispute between Lithuania and Belarus under the Espoo Convention. It should be noted that NCP

²⁰⁰ MOPs to the Aarhus Convention, Report of the Third Meeting, ECE/MP.PP/2008/L.8/Add.6, (4 April 2008), available at http://www.unece.org/fileadmin/DAM/env/documents/2008/pp/mop3/ece_mp_pp_2008_L_8_add_6_e.pdf accessed 19 June 2016.

²⁰¹ Ibid, para. 5.

²⁰² MOPs to the Aarhus Convention, Report of the Fourth Meeting, ECE/MP.PP/2011/L.19, (13 April 2011), available at http://www.unece.org/fileadmin/DAM/env/pp/mop4/Documents/ece_mp_pp_2011_L_19_e.pdf accessed 19 June 2016.

²⁰³ MOPs to the Aarhus Convention, Report of the Fifth Meeting, ECE/MP.PP/2014/CRP.10, (30 June-1 July 2014), available at http://www.unece.org/fileadmin/DAM/env/pp/mop5/Documents/In-session_docs/ECE.MP.PP.2014.CRP.10.ENG.pdf accessed 19 June 2016.

process initiated by party-to-party trigger has been unpopular, since it can be considered as an unfriendly act. Therefore, States will choose to do this only if their major interests are at stake.²⁰⁴

2.1.6 RFMO Panels

The dispute was concerned with the decision of the SPRFMO Commission not to allocate Russia the total allowable catch of jack mackerel which Russia claimed that such action was unjustifiably discriminated against action against it.²⁰⁵ Russia objected to this decision and proposed its own alternative measures. Having found that the failure to allocate the total allowable catch of 360,000 tonnes of jack mackerel resulted in unjustifiable discrimination against Russia and the alternative measure proposed by Russia was not equivalent in effect to CMM 1.01, the review panel recommended the use of an alternative measure. Given the fact that Russia did not institute dispute settlement proceedings under the SPRFMO, this means, on the one hand, that the recommendation became binding and Russia was expected to comply with it and, on the other hand, that the SPRFMO commission should allocate a quota for Russia in future years. The SPRFMO commission complied with the recommendation by adopting the Conservation and Management Measure for *Trachurus murphyi* CMM 2.01 in 2014,²⁰⁶ which allocated Russia a quota of 13,445 tonnes.²⁰⁷ As for Russia, it wrote to the Acting Executive Secretary confirming its commitment to follow the Recommendation made by the Review Panel.²⁰⁸ It can be concluded that both parties followed the recommendations and the key issue of the dispute has been settled. With regard to behaviour change, the SPRFMO commission has allocated Russia a quota of 15,100 tonnes in 2015²⁰⁹ and 2016.²¹⁰

²⁰⁴ Susana Borràs Pentinat, 'Comparative Analysis of Selected Compliance Procedures under Multilateral Environmental Agreements' in Sandrine Maljean-Dubois and Lavanya Rajamani (eds), *La Mise en Oeuvre du Droit International de l'Environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011) 343.

²⁰⁵ See chapter 3, section 4.2.

²⁰⁶ See SPRFMO, 'CMM 2.01 Conservation and Management Measure for *Trachurus murphyi*', reprinted at <<https://www.sprfmo.int/assets/Meetings/Meetings-2013-plus/Commission-Meetings/2nd-Commission-Meeting-2014-Manta-Ecuador/Annex-G-CMM-2.-01-Trachurus-Murphyi.pdf>> accessed 19 June 2016.

²⁰⁷ But note that this amount was not regarded as setting a precedent.

²⁰⁸ SPRFMO, 'Russian Federation Accepts' (8 July 2013), available at <<http://www.sprfmo.int/new-meetingpage-News/archive-news/russian-federation-accepts-recommendations/>> accessed 19 June 2016.

²⁰⁹ SPRFMO, 'CMM 3.01 Conservation and Management Measure for *Trachurus murphyi*', reprinted at <<https://www.sprfmo.int/assets/Meetings/Meetings-2013-plus/Commission-Meetings/3rd-Commission-Meeting-2015-Auckland-New-Zealand/Annex-H-CMM-3.-01-for-Trachurus-Murphyi-rev2.pdf>> accessed 25 June 2016.

2.2. Mechanisms to Induce Compliance

In this subsection, the issues that will be discussed revolve around the post-decision-making phase where a decision has been rendered and the losing party refuses to comply with it. Thus, the availability of mechanisms to induce or compel the losing party to comply will be explored below.

2.2.1 Mediation, Conciliation and Inquiry

These methods are non-binding, there is no obligation to comply and, therefore, the possible need for a compliance mechanism does not arise. In practice, as these methods are purely consensual, non-compliance is unlikely to be a problem in practice. Although there is no obligation to comply, the parties need to take the principle of good faith into account. To engage in dispute settlement procedure in good faith can be considered as a general principle of law and a principle of customary international law.²¹¹ Whatever mechanism the parties choose (judicial or non-judicial means), they have to respect and settle their dispute in good faith in a spirit of cooperation. As the ICJ in the *Aerial Incident* case held that ‘The Court's lack of jurisdiction does not relieve States of their obligation to settle their disputes by peaceful means. The choice of those means admittedly rests with the parties under Article 33 of the United Nations Charter. They are nonetheless under an obligation to seek such a settlement, and to do so in good faith in accordance with Article 2, paragraph 2, of the Charter.’²¹² This means that even if the parties choose non-judicial mechanisms in which their recommendations are non-binding, the parties shall consider them in good faith. For example, in the Watercourses Convention, it explicitly states that the parties concerned shall consider the recommendation provided by the inquiry commission in good faith.²¹³

²¹⁰ SPRFMO, ‘CMM 4.01 Conservation and Management Measure for *Trachurus murphyi*’, reprinted at <<https://www.sprfmo.int/assets/Fisheries/Conservation-and-Management-Measures/CMM-4.01-T-murphyi-2016-4Mar2016.pdf>> accessed 25 June 2016.

²¹¹ Guy Goodwin-Gill, ‘State Responsibility and the ‘Good Faith’ Obligation in International Law’ in Malgosia Fitzmaurice and Dan Sarooshi (eds), *Issues of State Responsibility before International Judicial Institutions* (2004) 75, 88. See also Bin Cheng, *General Principles of Law as Applied by International Courts and Tribunals* (CUP, 1994) 105.

²¹² *Case Concerning the Aerial Incident of 10 August 1999 (Pakistan v. India)* (Judgment) [2000] ICJ Rep 12, para. 53. See also paras. 5 and 11 of the Manila Declaration on the Peaceful Settlement of International Disputes.

²¹³ Art. 33 (8) of the Watercourses Convention.

2.2.2 Arbitration

In principle, the execution of awards cannot be carried out by arbitral tribunals themselves. Nor are there other institutions with the competence to enforce arbitral awards rendered by inter-State arbitral tribunals. Compliance with awards depends solely on the parties to a dispute, since ‘recourse to arbitration implies an undertaking to implement the tribunal’s award(s) in good faith (*bona fide*)’.²¹⁴ However, the execution of arbitral awards could possibly be brought to tribunals again as shown in the OSPAR Convention which stipulates that ‘any dispute which may arise between the parties concerning...the execution of the award may be submitted by either party to the arbitral tribunal which made the award’.²¹⁵ This kind of provision could serve as a good model for other treaties. In addition, since failure to comply with an arbitral award is a breach of an international obligation, it would be possible for the winning party to take action against a non-complying losing party either by taking counter-measures or by bringing it before an international court if it can find a jurisdictional basis for doing so. The optional clause of the ICJ is one possibility if both parties have a declaration under it.

2.2.3 International Courts

The sole enforcer of the ICJ’s judgment is the Security Council (SC) as provided in Article 94 (2) of the UN Charter, which states that ‘If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems it necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.’²¹⁶ It should be noted that the SC cannot take action at its own initiative but only in a case where a party refers the matter to it.²¹⁷ This means that other members of the UN that are not parties to the dispute cannot invoke this Article to enforce the ICJ’s judgment. However, they may raise the issue of non-compliance with the judgment with the SC or the General Assembly by showing that the non-compliance will result in international friction or give rise to a dispute and, should that dispute persist, it may be likely to endanger the maintenance of international

²¹⁴ Charles H. Brower II, ‘Arbitration’ in Rüdiger Wolfrum (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2007).

²¹⁵ Art. 32 (10) (b) of the OSPAR Convention.

²¹⁶ Art. 94 (2) UN Charter.

²¹⁷ Hermann Mosler and Karin Oellers-Frahm, ‘Article 94’ in Bruno Simma (ed), *The Charter of the United Nations: A Commentary*, vol 2 (2 edn, OUP 2002) 1177.

peace and security.²¹⁸ This is the only way in which other States than the States which are parties to the case and that have an interest in protecting the environment can have recourse to these provisions. As far as the measures that the SC may adopt are concerned, these may include a wide range of measures depending on the discretion of the SC, such as ‘measures which it deems appropriate to contribute to ensure compliance with the judgment’.²¹⁹ Judge Koroma claims that ‘the effectiveness of the Court’s international dispute settlement results from...the compliance mechanism underpinning it within the institutional framework provided by the United Nations, above all its Security Council.’²²⁰ However, Article 94 has never yet been used and therefore there must be some doubt as to its value. It could not be used against a permanent member of the SC or against a State sufficiently close to a permanent member as the latter would veto a draft resolution.

Unlike the ICJ, the ITLOS’s judgments cannot be enforced in the same manner, nor does UNCLOS provide for any other enforcement mechanism.²²¹ Nonetheless, failure to comply with a court judgment is a breach of an international obligation set out in Article 296 (1) UNCLOS,²²² thus allowing the winning State to take counter-measures against the non-complying losing State—which is difficult for a weaker State to do that against a stronger State—or even possibly to bring a new case against it as Nicaragua is currently doing with Colombia alleging that Colombia has failed to comply with the ICJ’s judgment of 2012 delimiting the maritime boundary between the two States.²²³

2.2.4 Non-Compliance Procedures

There are various possible penalties that can be imposed on persistent non-complying parties that are still in non-compliance with a NCP decision. In practice, the COP/MOP usually reviews implementation at its next meeting following a decision of

²¹⁸ Art. 34 UN Charter.

²¹⁹ Mosler and Oellers-Frahm (n 217) 1177.

²²⁰ Abdul G. Koroma, ‘The Binding Nature of the Decisions of the International Court of Justice’ in Laurence Boisson de Chazournes and Marcelo Kohen (eds), *International Law and the Quest for Its Implementation/Le Droit International Et La Quete de Sa Mise En Oeuvre: Liber Amicorum Vera Gowlland Debbas* (Martinus Nijhoff Publishers 2010) 432.

²²¹ In relation to the enforcement of decisions of the Seabed Disputes Chamber it is expressly stated in Art. 39 of the ITLOS Statute that ‘the decisions of the Chamber shall be enforceable in the territories of the States Parties in the same manner as judgments or orders of the highest court of the State Party in whose territory the enforcement is sought’.

²²² Art. 296 (1) provides that ‘Any decision rendered by a court or tribunal having jurisdiction under this section shall be final and shall be complied with by all the parties to the dispute’.

²²³ *Alleged Violations of Sovereign Rights and Maritime Spaces in the Caribbean Sea (Nicaragua v. Colombia)* (Application Instituting Proceedings) [2013] 24.

a compliance committee on the basis of the information submitted by the non-complying parties to the compliance committee before the COP/MOP meeting, which the committee will examine and report to the COP/MOP. By the nature of the NCPs, which involve the resolution of a dispute in a cooperative manner and which put the emphasis on providing advice or assistance to the non-complying parties, the enforcement of the NCPs' recommendations and findings is slightly soft as can be seen from the language used in the follow-up decisions in cases where the non-complying parties are still not in compliance with their obligations. For example, when MOPs would like the non-complying parties to fulfill their obligations, they usually use nuanced words—such as *encourage*, *urge*, *invites*, *express disappointment*, *remain concerned* and *recommend*—in order to raise awareness of the ongoing non-compliance or to accelerate and put pressure on the parties concerned to change their domestic law or practice in line with the particular MEAs, as shown specifically in the LRTAP NCP.²²⁴ In addition, specific measures to put pressure on the non-complying parties may include the submission of a report showing the progress they have made and lists of specific ways of achieving compliance.²²⁵ Also, the issuing of a formal caution to the Parties concerned, along with recommendations to the non-complying parties, is a possible response, such as recommending them to consider accommodating an expert mission with a view to getting expert opinion on possible ways to implement the decisions of NCPs, as in the case of Aarhus NCP. Should a state of non-compliance continue, stronger measures would be applied, such as the suspension of special rights and privileges accorded to the non-complying parties under the particular conventions.

The most striking feature of the enforcement of measures against the repeated non-complying parties can be seen under the CITES and the Montreal Protocol enforcement that involved the use of trade restrictions or prohibitions of listed substances. For the CITES, the Standing Committee can advise parties to ban the non-complying parties from international trading in CITES specimens, or encourage suspension of trade in specimens of one or more CITES species, or in all CITES species, or impose restrictions of the right to vote at one or more meetings of the

²²⁴ See Tuomas Kuokkanen, 'Practice of the Implementation Committee under the Convention on Long-range Transboundary Air Pollution' in Ulrich Beyerlin, Peter-Tobias Stoll & Rüdiger Wolfrum, eds., *Ensuring Compliance with Multilateral Environmental Agreements* (Martinus Nijhoff Publishers 2006) 45-46. See also in case of repeated non-compliance in the Rotterdam Convention and the Stockholm Convention.

²²⁵ See also in the case of repeated non-compliance in the Montreal Protocol.

Conference of the Parties, or declare the ineligibility of a Party to be a member of the Standing Committee, or impose the loss of the right of a Party and its experts to receive documents for meetings, or declare the ineligibility of a Party to receive other financial assistance from the Convention.²²⁶

2.2.5 RFMO Panels

All four RFMOs, except the WCPF Convention, already have an array of measures to deal with non-complying States, either in their constituent conventions or in measures adopted by them. For the SPRFMO Convention, it provides a special dispute settlement process where an objecting State does not accept the panel's recommendations. The objecting States can choose to institute dispute settlement proceedings under this Convention which are those compulsory proceedings pursuant to Part VIII of the 1995 Agreement where the dispute concerns straddling stocks.²²⁷ The same provision can also be found in the NAFO Convention, the SEAFO Convention the NEAFC Convention in which the parties can also submit the dispute to proceedings pursuant to Section 2 of Part XV of the UNCLOS.²²⁸

In addition, it is possible that the issue of non-compliance could be raised at the meeting of the RFMOs. As RFMOs are international organisation which has legal personality, they have general powers to adopt a decision with regard to non-complying States. The general power of RFMOs derive from a catch all provision allowing them to adopt any measures necessary for achieving the objective of the treaties of RFMOs.²²⁹ For example, they might adopt decisions at the internal level stating that non-complying States shall not enjoy the right of casting votes and make any objection with regard to conservation measures such as decrease catch limits until such State has complied with the recommendations. This might induce compliance and discourage further non-compliance.

²²⁶ Interpretation and Implementation of the Convention: Possible Measures for Non-Compliance, Document Prepared by the CITES Secretariat for the 46th Meeting of the Standing Committee, 12-15 March 2002, SC46 Doc. 11.3, para. 13, available at <<https://cites.org/sites/default/files/eng/com/sc/46/46-11-3.pdf>> accessed 19 June 2016. The measures are currently used on a regular basis. The same measures can be seen in the Aarhus Convention, in the Protocol on Water and Health.

²²⁷ Para. 10 (b)-(c) of Annex II to the SPRFMO Convention.

²²⁸ Art. XV (6) of the NAFO Convention, Art. 24 (4) of the SEAFO Convention and Para. 42 (e) of the Rules of Procedure of the NEAFC Convention.

²²⁹ See Art. 10 (1) (n) and (o) of the WCPF Convention; Art. VI (5) (h) of the NAFO Convention; Art. 8 (p) of the SPRFMO Convention; Art. 6 (3) (o) of the SEAFO Convention; Art. 4 (1) of the NEAFC

CONCLUSIONS

This chapter has examined the effectiveness of each of the dispute settlement mechanisms in dealing with an international environmental dispute. In doing so, criteria of effectiveness have been established with a view to using them as a framework and assessing each of the mechanisms in the light of those criteria. The effectiveness is measured in terms of outcomes.

1) Resolution of a dispute and its effect on States behaviour: For the first criteria, the effectiveness of dispute settlement mechanisms in settling international environmental disputes will be assessed by considering whether 1) the key issues in a dispute have been settled, 2) the losing State complied with the decision and 3) has the decision had any wider effect on the behaviour of the States parties to the dispute. It has to be acknowledged that applying such criteria to the real cases has some limitations because there are so few cases except in relation to NCPs. One should not conclude that a pattern of compliance or noncompliance in relation to a particular dispute settlement mechanism that has been found in this chapter will necessarily represent the general pattern that might emerge with many more cases. This means that any conclusions about the relative effectiveness of different mechanisms in terms of this criterion must be tentative.

Those cases which were brought before the judicial means, notably the ICJ, seemed to be settled when the judgments or awards were rendered but, in some cases, such as the *Gabčíkovo-Nagymaros Project* case and the *Pulp Mills* case, the parties hardly changed their behaviour in relation to issues of the dispute that is the question. At least the judgments or awards could temporarily halt the worsening relations between States or even establish a regime of regulating the pollution, as shown in the *Trail Smelter Arbitration* where the tribunal adopted several measures in order to restrict emissions or to strengthen cooperation, as shown in provisional measures order in the *Land Reclamation* decided by the ITLOS and to provide the criteria for killing whales for scientific research purposes, as shown in the *Whaling* case.

As regards non-judicial means, experience shows that the parties complied with the recommendations of the mediators, inquiry committees, compliance committees and RFMO panels. Nevertheless, the situation with regard to behaviour changes, in some cases, especially those cases which were brought before some NCPs, still needs to be further modified, either because of the lack of financial resources or the tardiness in enacting domestic law.

2) Mechanisms to induce compliance: the effectiveness can be evaluated by looking at the existence of mechanisms to induce compliance. It is clear that non-judicial means have no mechanisms to induce compliance and they do not need to have, whereas in the case of non-compliance with judicial decisions, especially the ICJ's judgments, the SC can, in theory, play this crucial role even though, in practice, it has never adopted any measures to induce the losing party to comply. Even in cases of arbitration where an award may not be enforceable, like the ICJ's judgments, the parties can use other ways to induce the losing party to comply, for instance by bringing the dispute as a new case to the ICJ and adopting counter-measures. For the ITLOS's judgments, UNCLOS does not provide any mechanism to enforce the judgment but it is still possible to bring a new case against the losing party, since failure to comply with a judgment can be considered a breach of an international obligation.

However, with some NCPs, there are measures, such as the denial of benefits under the MEA concerned and trade restrictions, to induce repeated non-complying parties to comply. For RFMOs panels, there are dispute settlement mechanisms under UNCLOS and the Fish Stocks Agreement if an objecting State does not accept the panel's recommendations. In addition, RFMOs, as an international organisation, can deal with the issue of non-compliance instead of resorting to external bodies to compel losing States to implement recommendations. This can be done through adopting a wide range of measures to put pressures on them such as suspending their right to vote. To conclude, NCPs and RFMO panels would seem to have more effective compliance mechanisms than judicial means, notably arbitration.

CHAPTER 6

PROPOSALS FOR IMPROVING INTERNATIONAL ENVIRONMENTAL DISPUTE SETTLEMENT

INTRODUCTION

After having discussed the questions of the suitability and effectiveness of dispute settlement mechanisms in settling international environmental disputes in chapters 4 and 5, what was found was that those mechanisms have some drawbacks that appear to be a hindrance to the better resolution of environmental disputes. The aim of this chapter is to suggest ways in which these drawbacks could be remedied and the dispute settlement mechanisms improved. Thus the main research question is: How could the dispute settlement mechanisms that are available in international law be improved? The proposals in this chapter are based primarily on the main findings of the shortcomings of each of the mechanisms identified in the previous two chapters. In addition, there are other shortcomings that were not mentioned in chapters 4 and 5 because they do not fit neatly into the issue of suitability or effectiveness. They are discussed in this chapter so as to give a complete picture of lingering problems and solutions.

It should be noted from the outset that the proposals that I am going to suggest would have a chance of being carried out in practice rather than putting forward proposals that are merely theoretical, abstract or very difficult to implement. Therefore, this chapter will not propose creating a new institution, such as an international environmental court, which has received fierce criticisms due to having no real benefit in relation to the dispute settlement system in international law and being completely impractical,¹ the proposals in this chapter will not propose creating

¹ See for example in Ellen Hey, *Reflections on an International Environmental Court* (Kluwer Law International 2000); Ole W. Pedersen, 'An International Environmental Court and International Legalism' (2012) 24 JEL 547 and Alan Boyle and James Harrison, 'Judicial Settlement of International Environmental Disputes: Current Problems' (2013) 4 JIDS 245; For the supporters of international environmental courts see Alfred Rest, 'An International Court for the Environment: The Role of the Permanent Court of Arbitration' in The International Bureau of the PCA (ed), *International Alternative Dispute Resolution: Past, Present and Future: The Permanent Court of Arbitration Centennial Papers* (Kluwer Law International 2002) 53-65; Stephen Hockman, 'An International Court for the Environment' (2009) 11 Env L Rev 1; Kenneth F. McCallion and H. Rajan Sharma, 'Environmental

a new institution nor propose, for example, amending the ICJ Statute, since it would require any amendment to be ratified by two-thirds of UN members including all permanent members of the Security Council, a requirement that in practice would be extremely hard to fulfill.²

1. PROPOSAL FOR ADDRESSING THE WEAKNESS OF NON-JUDICIAL MECHANISMS

The problem that is evident in the settlement of disputes by non-judicial mechanisms is the difficulty in selecting mediators, conciliators or inquiry commissions with expertise in environmental issues with sufficient diplomatic qualities. This is supposed shortcoming that could emanating from these mechanisms in the case where the parties choose their own decision-makers.

One way to overcome this weakness would be to create a roster of experts who can perform the dispute settlement and who are readily available for the disputing States, as the PCA does for arbitration or a roster of conciliators under UNCLOS.³ Rosters of experts could be established under international organisations or other institution whose interest is in the protection of the environment. UNEP may be the primary organisation that needs to consider this issue. It is worthwhile to ponder the practice of the World Bank, since it can provide some guidance on how other organisations can learn from the Bank's role in this matter. In this connection, the Operational Policies on Projects on International Waterways of the World Bank Operational Manual can be considered as a crucial policy to be applied in a dispute arising from the utilisation of international waterways, for instance the hydroelectric, irrigation or industrial projects that are financed by the Bank, which in turn may cause pollution.⁴ The function of the Bank is to stand ready in order to assist riparians in achieving 'the efficient use and protection of the waterway' which can be done

Justice without Borders The Need for an International Court of the Environment to Protect Fundamental Environmental Right' (1999-2000) 32 GeoWashJInt'l L& Econ 351; Joost Pauwelyn, 'Judicial mechanisms: Is there a need for a World Environment Court?' in W. Bradnee Chambers and Jessica F. Green (eds), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms* (United Nations University Press 2005) 150-177.

² Art. 69 of the ICJ Statute.

³ See Art. 2 of Annex V to UNCLOS. See the list of conciliators at <http://www.un.org/depts/los/settlement_of_disputes/conciliators_arbitrators.htm> accessed 19 June 2016.

⁴ See The World Bank, 'Operation Manual 7.50—Projects on International Waterways' (Revised March 2012) (hereinafter Operation Manual 7.50), available at <<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPMANUAL/0,,contentMDK:20064667~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184,0.html>> accessed 29 September 2015.

through the promotion of cooperation and goodwill among riparians.⁵ The implication is that the Bank is ready to act as a third party in providing assistance to help the parties to resume their cooperation which in turn may bring the dispute to an end.

Furthermore, for the purpose of enhancing ‘the authority of its mediation or conciliation function’,⁶ according to Rule 6 of the Operational Manual, the Bank ‘may appoint one or more independent experts to examine the issues’ where the proposed project is objected to by the other riparians. The appointment of experts in this case is something akin to the establishment of an inquiry commission, but what is different from the normal inquiry process is that the parties do not need to find a person who will have the proper qualifications for settling water disputes or waste time in drafting the procedures or determining the tasks of such experts as the Bank does so. This is because the Bank has a roster of highly qualified independent experts maintained by the vice-presidency for Environmentally and Socially Sustainable Development (ESDVP) which consists of ten names and is updated at the beginning of each fiscal year.⁷ One or more experts will be selected by the ESDVP with two restrictions, namely that such experts are not nationals of any of the riparians of the waterways in question and the experts may not have any other conflicts of interest in the matter.⁸ With regard to the terms of reference that the experts need to follow, these are set out beforehand by the ESDVP and the Regional Vice-President (RVP) which involves the examination of the Project/Program Details, assisted by the Bank where necessary.⁹ Finally, when the experts have completed their task, a report should be submitted to the RVP and the ESDVP. Nevertheless, their technical opinion is not meant to be definitive but is subject to the review of the RVP and the ESDVP and the opinion is not intended to determine the rights and obligations of the riparians.¹⁰

The established practices of the Bank could be used as a guideline for other international organisations, such as the International Union for Conservation of Nature (IUCN), if they wish or are requested to play a role in settling international environmental disputes. There may be two forms of assistance that international

⁵ Ibid.

⁶ Atilla Tanzi, ‘Recent Trends in International Water Law Dispute Settlement’ in The International Bureau of the Permanent Court of Arbitration (ed), *International Investments and Protection of the Environment: The Role of Dispute Resolution Mechanisms* (Kluwer Law International 2001) 153.

⁷ See Rules 8 and 12 of the Operation Manual 7.50.

⁸ Ibid, Rule 9.

⁹ Ibid, Rule 10.

¹⁰ Ibid, Rule 12.

organisations could offer to the disputing parties. The first is that international organisations could themselves be directly involved in the process of dispute settlement, acting as mediators, conciliators or fact-finders. This requires international organisations to set up mandates and draft guidance in the same way as the Bank drafted the Operational Manual. The second possibility is that international organisations could facilitate the deliberations of the disputing parties by providing a list of experts which the parties could choose in consultation with the competent organs of the international organisation concerned without the latter getting directly involved in a case or proposing any recommendations for the settlement of the dispute to the parties.

It is also worth referring to the recent development of the potential role played by the UNEP in settling international environmental disputes which States may consider to be a very useful and time-saving strategy.¹¹ UNEP nowadays, stands ready either to offer its own technical expertise to provide impartial and trusted advice or to provide assistance for ongoing mediation. As it has clearly stated that ‘UNEP’s expertise is available to international mediation processes where technical natural resource know-how can play a constructive role and complement the mediation team’s competencies. This service can be related to disputed natural resources or using shared natural resources as a platform for cooperation and confidence building between the parties.’¹² States should be encouraged to resort to this service—known as ‘environmental diplomacy support’—to settle their disputes where technical natural resource know-how is an issue.¹³

Another option for States is mediation provided by the UNDPA. Since 2006, the UNDPA’s Mediation Support Unit (MSU) has managed a mediation roster which has around 300 mediation experts in various fields, including the environment, in response to different aspects of the mediation process.¹⁴ In addition, the Department also manages the Standby Team of Mediation Experts who are full-time mediation

¹¹ In 2011, the UNGA requested the Secretary-General to develop guidance for more effective mediation; see *Strengthening the Role of Mediation in the Peaceful Settlement of Disputes, Conflict Prevention, and Resolution* UNGA Res 65/283 (28 July 2011) A/RES/65/283. UNEP, in response to the request, carried out research with regard to the mediation of resources disputes taking into account the past practices.

¹² UNEP, ‘Environmental Diplomacy and Mediation Support’, available at <<http://www.unep.org/disastersandconflicts/Introduction/ECP/EnvironmentalDiplomacy/tabid/105991/Default.aspx>> accessed 29 September 2015.

¹³ Ibid.

¹⁴ UN, Department of Political Affairs, ‘Diplomacy and Mediation’, available at <<http://www.un.org/undpa/diplomacy-mediation>> accessed 29 September 2015.

experts which are ready to be deployed upon the request of the UN's officials and other non-UN mediators engaged in mediation efforts.¹⁵ Their duty is to provide technical advice—such as setting an agenda, or drafting the texts of agreements—to these persons. The Team is composed of those members who have expertise in several aspects of the mediation process and one of them has expertise in the issue of natural resources.¹⁶

Given that non-judicial mechanisms take place if the parties consent, it depends upon States' willingness whether or not they prefer to resort to the above-explained options.

2. PROPOSALS FOR ADDRESSING THE WEAKNESSES OF JUDICIAL MECHANISMS

2.1 Addressing the Problem of the Lack of Mechanisms to Induce Compliance with Arbitral Awards or the ITLOS Judgments

As has been mentioned in the previous chapter, one of the shortcomings of the arbitration process is the lack of mechanisms to enforce an international arbitral award.¹⁷ The question is how can the existing mechanisms make a contribution to the implementation process in this post-adjudicative phase and play a role in facilitating or inducing a losing State that refuses to abide by the award to comply with the award. While recognising the fact that the winning party can take action against a non-complying losing party by bringing it before an international court, the proposal below will provide ways in which other mechanisms can induce compliance.

Two types of cases may be distinguished. Firstly, there may be a dispute in which MEAs are at issue before the international arbitral tribunals, since some MEAs that have a dispute settlement clause providing for arbitration.¹⁸ Secondly, a dispute may arise from an alleged breach of the environmental obligations set out in the convention other than a MEA. To begin with the first type of case, it might be suggested that the plenary organs of the MEA, namely Conferences of the Parties

¹⁵ UN, Department of Political Affairs, 'Standby Team of Mediation Experts' (2014) <http://peacemaker.un.org/sites/peacemaker.un.org/files/STB-Fact-Sheet-2014_0.pdf> accessed 29 September 2015.

¹⁶ Ibid.

¹⁷ See chapter 5, section 2.2.2.

¹⁸ To date, there have been no such cases. Part of the reason for this is that NCPs remove some of the need for other forms of dispute settlement.

(COPs) or Meetings of the Parties (MOPs), if these kinds of institutional arrangements exist, may perform the task of inducing compliance. This task can be perceived as one of the functions of COPs/MOPs in keeping under review and supervising the implementation of the substantive obligations provided in particular conventions. For instance, this situation might arise if an arbitral tribunal pronounced that a State had failed to observe the obligations in the CBD and afterwards such a losing State refused to execute the arbitral award. The issue of non-compliance may be raised to the CBD COP, since one of its functions in supervising the implementation is to 'consider and undertake any additional action that may be required for the achievement of the purposes of this Convention in the light of experience gained in its operation'.¹⁹ Non-compliance with the arbitral award seems to undermine the Convention's regime in the sense that the State found in breach of the CBD's obligations denies the need to comply with the obligations that it is bound to fulfill so as to achieve the objectives of the Convention. The kinds of sanctions that the CBD COP could impose include the suspension of voting rights or soft measures such as naming and shaming that State. For the UNFCCC, the COP may adopt 'the decisions necessary to promote the effective implementation of the Convention'.²⁰ This broad provision would allow the COP to become involved in the issue of non-compliance with the award of the losing State, since persistent non-compliance could lessen the effectiveness of the Convention which is, in turn, requires actions to be taken. Given the fact that the dispute is adjudicated by impartial arbitrators who can examine the conduct of a State which is alleged to be in breach of its obligations, an arbitral decision which finds that a State has actually violated these obligations can be considered as the authoritative determination or evidence which COPs/MOPs can take into account when considering a decision to adopt particular sanctions.

Another way of inducing compliance would be to expand the scope of the functions of NCPs so as to include a situation where there is non-compliance with an arbitral award. Such non-compliance may be counted as one of the forms of non-compliance with the obligations set out in MEAs which can be taken as falling within the process of NCPs. The issue can be raised by the winning in the arbitral proceedings, or by any parties to the MEA in question or NGOs, depending upon the triggering provision of the MEAs. Given the fact that NCPs can facilitate the parties

¹⁹ See Art. 23 (4) (i).

²⁰ See Art. 7 (2) UNFCCC.

in fully complying with their obligations in those cases where a party is found to be in non-compliance, the same principle could be applied also in a situation where the losing State could not execute the arbitral award. If the source of failure in complying with the arbitral award stems from the lack of financial or human resources, appropriate assistance could be provided to the losing State. Sanctions are possible if the losing State completely denies that it has any obligation to execute the arbitral award in good faith even though it has the full capacity to do so. Thus, hard sanctions adopted by NCPs in this case are required in order to maintain the effectiveness of the convention regime.

A second situation is where the subject matter of the dispute is not about a convention under which COPs/MOP has been established, but other kinds of environmental treaty that have established some form of supervisory body, such as the OSPAR Convention, UNCLOS and watercourses conventions. It might be suggested that the institutions established under these conventions could perform the task of inducing compliance. For instance, the institutions established under particular international watercourses conventions in the form of international joint watercourses commissions. For example, the Mekong River Commission,²¹ the Administrative Commission of the River Uruguay (CARU)²² or the International Commission for the Protection of the Rhine²³ could also play this role. It should be noted that those institutions do not have a direct duty to enforce the arbitral award, but the absence of explicit provision or of a special organ that is focused particularly on this matter does not prevent them from exercising their implied powers which are necessary to fulfill their functions. Edith Brown Weiss observes that ‘one can conceive of the function more broadly as one of facilitating implementation of agreed obligations and providing means to strengthen compliance with the obligations and programs’.²⁴ This could be done through the adoption of measures that urge or induce the losing State to

²¹ Art. 18 (B) of the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin broadly entrusted the Council with the duty of making ‘decisions necessary to successfully implement this Agreement’ (1995) 34 ILM 864.

²² The ICJ in the *Pulp Mills* case held that CURU is ‘a joint mechanism with regulatory, executive, administrative, technical and conciliatory functions, entrusted with the proper implementation of the rules contained in the 1975 Statute governing the management of the shared river resource’ *Pulp Mills* case (Provisional Measures) (Order) [2006] ICJ Rep 113, para. 81.

²³ See the tasks of the Commission in Art. 8 of the Convention on the Protection of the Rhine (12 April 1999), available at http://www.iksr.org/fileadmin/user_upload/Dokumente_en/convention_on_the_protection_of_the_rhine.pdf accessed 8 October 2015.

²⁴ Edith Brown Weiss, *International Law for a Water-Scarce World* (Martinus Nijhoff Publishers 2013) 177.

execute the judgment. Furthermore, there might be a case where the parties did not comply with the award because of their lack of capacity to handle the technical matters. The technical body, if there is one, that was established under the watercourses conventions may provide assistance to the parties in order to help them comply with the award.

For UNCLOS,²⁵ it does not have some form of NCP but there is the meeting of States parties which is not designed to play a supervisory role. Rather, it deals mainly with administrative and financial matters of the ITLOS.²⁶ However, it has adopted some substantive decisions with regard to the implementation of UNCLOS, such as submissions to the Commission on the Limits of the Continental Shelf (CLCS).²⁷ It might be possible, in theory, that the Meeting might discuss and decide on the issue of non-compliance with arbitral decisions. For example, in the case where the UK does not comply with the Chagos MPA award, the Meeting could urge or request the UK to adopt measures in order to comply with the judgment. Through this control, the Meeting's decisions could, to some extent, put some pressure on non-complying States.

There are some cases where there is no supervisory body, e.g. in the *Iron Rhine* arbitration. In such situation, countermeasures might be resorted to as shown in the *El Chamizal* case where Mexico exercised countermeasures against the US for not complying with the arbitral award.²⁸ Non-judicial means could be used such as mediation as exemplified in the *Beagle Channel* case where Argentina refused to execute the arbitral award.²⁹

²⁵ See chapter 5, section 2.2.3.

²⁶ Art. 391 (2) of UNCLOS. See the discussion of the parties whether or not the Meeting can supervise the implementation of UNCLOS in Report of the Twenty-First Meeting of States Parties (29 June 2011) SPLOS/231, paras. 119-120.

²⁷ See, for example, Decision regarding the date of commencement of the ten-year period for making submissions to the CLCS set out in article 4 of Annex II to UNCLOS, SPLOS/72 (29 May 2001) and Decision regarding the workload of the CLCS and the ability of States, particularly developing States, to fulfill the requirements of article 4 of annex II to UNCLOS, as well as the decision contained in SPLOS/72, paragraph (a), SPLOS/183 (20 June 2008).

²⁸ See Philip Jessup, 'El Chamizal' (1973) 67 AJIL 423.

²⁹ *Beagle Channel Arbitration, (Argentina v. Chile)* (1977) 52 ILR 93. See the declaration of Argentina which declared that the award was null and void in Argentina—Chile: Exchange of Diplomatic Notes concerning the Beagle Channel Arbitration, (1978) 17 ILM 738. See also Thomas Princen, 'International Mediation—The View from the Vatican—Lessons from Mediating the Beagle Channel Dispute' (1987) 3 NJ 347. See also Benedetto Conforti, *International Law and the Role of Domestic Legal Systems* (Martinus Nijhoff Publishers 1993) 5, footnote 6. The text of the Treaty is reproduced in Argentina—Chile: Negotiation and Conclusion of Border Dispute Agreement, (1985) 24 ILM 1.

2.2 Addressing the Problems Relating to Scientific and Technical Evidence

Dealing with scientific and technical evidence is one of the thorniest problems for the judicial mechanisms, especially the ICJ as has been analysed in the previous two chapters.³⁰ Such evidence is of cardinal in order to ascertain the facts that give rise to a dispute. Therefore, judges need to determine such facts carefully, especially in environmental cases. There are three possible ways that may help judges to familiarize themselves with the evidence are as follows:

2.2.1 Drawing on the Work of an Existing Inquiry Commission

Where a fact-finding body had investigated the same set of facts of a dispute prior to the referral of that dispute to a court, the latter could draw on the report of the body concerned when deciding the case.³¹ This was done by the ICJ in the *case concerning Armed Activities on the Territory of the Congo*, where it considered the Report of the Porter Commission.³² The report was the outcome of the work conducted by the Judicial Commission of Inquiry into Allegations of Illegal Exploitation of Natural Resources and other Forms of Wealth in the Democratic Republic of the Congo which was set up by the Ugandan Government in May 2001. Referring to the Report, the ICJ stated:

‘The Court moreover notes that evidence obtained by examination of persons directly involved, and who were subsequently cross-examined by judges skilled in examination and experienced in assessing large amounts of factual information, some of it of a technical nature, merits special attention. The Court thus will give

³⁰ See chapter 4, section 2.2.2. These problems are unlikely to happen in the context of arbitration since parties to a dispute can appoint relevant technical experts as the arbitrators: see chapter 4, section 2.1.2. The proposals below are concerned with the shortcomings in the context of the ICJ and ITLOS.

³¹ It should be noted that, the Court in the *Indus Waters Kishenganga Arbitration* had to consider the relevance of the findings of inquiry conducted by Professor Lafitte in the Baglihar dam case. Given that the Court was not asked to consider with the same set of facts as in the Baglihar dam case (i.e. Pakistan had not asked the Court to reverse the Baglihar determination, nor had it asked for the dismantling of the Baglihar dam) it held that such findings were irrelevant to the present case because the findings in the Baglihar dam case have not a general precedential value beyond the scope of that case. See the *Indus Waters Kishenganga Arbitration*, paras. 469-470.

³² Final report of the Judicial Commission of Inquiry into Allegation into Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo 2001 (May 2001-November 2002), Kampala, November 2002. To the best of author’s knowledge, this case is the only case that the dispute has been the subject of fact-finding been subsequently referred to the ICJ.

appropriate consideration to the Report of the Porter Commission, which gathered evidence in this manner.’³³

In this case the Report had already been accepted by the parties. In general, it should not cause any difficulty for a court to give weight to an inquiry report where the parties have accepted the findings. The findings will carry more weight if the inquiry is conducted by reliable international organisations. The parties should request international organisations, such as the UNEP or the World Bank, to perform the function of fact-finders. In this way, judicial and non-judicial means can work collaboratively in settling a dispute.

If the parties have not accepted the findings and afterwards they choose the judicial means as a forum to settle the dispute, how should a court treat those findings? It would seem that a court should not completely disregard such evidential material but it must consider the reliability of the persons or the institutions which produced the findings. If the findings emanate from skilled commissions, then the mere fact that the parties refuse to accept the findings would not devalue them. A court can probably take the findings into account as a reliable source of evidence. It would be unwise to ignore findings that have been produced by impartial examination. At least, it can save time for a court to engage in the examination of complex facts by appointing its own experts in order to shed light on the factual question.

2.2.2 Enhancing the Use of Site Visits

Rather than sitting on the bench and contemplating the evidence submitted by the parties, a court could play a more active role in obtaining the evidence from the place or locality to which the international environmental dispute relates. *In situ* inspections may help the Court to acquire a better understanding of the issues at stake and allow it to make a comprehensive assessment of the facts and apply them to the legal obligations. Clearly, site visits will ‘make it easier for the Court or tribunal to reach its conclusion’.³⁴ Article 66 of the Rules of the Court empowers the Court to make a visit

³³ *Case concerning Armed Activities on the Territory of the Congo (Congo v. Uganda)* (Judgment) [2005] ICJ Rep 168, para. 61.

³⁴ Shabtai Rosenne, ‘Visit to the Site by the International Court’ in Emile Yakpo and Tahar Boumedra (eds), *Liber Amicorum: Mohammed Bedjaoui* (Kluwer International 1999) 472. See also Philippe Sands, ‘Water and International Law: Science and Evidence in international Litigation’ (2010) 22 ELM 151, 161.

in the area that is in dispute. The ICJ, either *proprio motu* or at the request of a party, may exercise its functions with regard to the obtaining of evidence on the spot.³⁵

Lessons can be learned from the *Gabčíkovo-Nagymaros* case in which the Court visited the dams before it rendered its judgment.³⁶ In this case, the visits to the site were not initiated by the Court itself but instead Slovakia proposed this idea and Hungary agreed to it. This case serves as an example of how the parties may invite the Court to visit a site. After having consulted with each other, a protocol was concluded by the parties on 14 November 1995, agreeing on the matters of the site visit program, the ways in which the presentations of the delegations of each party were to be made, the press coverage and the costs of the visits which they agreed to share equally. On 3 February 1997, the Agreed Minutes were signed subsequently with a view to providing more details on how the Court's visit could be conducted. The Court then, on 5 February 1997, issued the Order to adopt the arrangements proposed by the parties as stated in the Protocol and the Agreed Minutes.³⁷ Formal presentations by both parties were made before the judges had a chance to go to the area of wetland where Hungary claimed that the ecosystem was affected by the operation of the dam. Interestingly, on-site experiments were also carried out to demonstrate to the judges that there actually were environmental harms. For Slovakia's part, it certainly had to prove that the operation of the barrage system would not cause any harm to the ecosystem. Comments upon the other party's presentations were made immediately after the end of each presentation, which signified that a proper balance was maintained in order to provide full opportunities to both parties in demonstrating the evidence to the judges. However, the Court makes no reference to what it found in its site visit in its judgment. That may suggest that the Court did not find the visit all that valuable. By contrast in the *Bay of Bengal* case, the arbitral tribunal does mention its site visit in its award and the impression is given that the tribunal found it useful.³⁸

It should be borne in mind that the site visit in the *Gabčíkovo-Nagymaros* case was an exceptional case where both parties were of the same view that a site visit would be beneficial in settling the dispute. There are two stumbling blocks that may hinder the use of site visit provisions. Firstly, if the site visit were to be initiated by

³⁵ See also Art. 44 (2) of the ICJ Statute which provides that 'The same provision shall apply whenever steps are to be taken to procure evidence on the spot'.

³⁶ See the details in Peter Tomka and Samuel S. Wordsworth, 'The First Site Visit of the International Court of Justice in Fulfillment of Its Judicial Function' (1998) 92 AJIL 133.

³⁷ *Gabčíkovo-Nagymaros* case (Order of 5 February 1997) [1997] ICJ Rep 3.

³⁸ *The Bay of Bengal Maritime Boundary Arbitration (Bangladesh v. India)* [2014] para. 263.

one of the parties, it might be the case that the other party would refuse to take part in the site visit arrangements, taking the view that the site visit was not necessary to the case. Consequently, the site visit would not occur, as is shown in the *South West Africa* case, where proposals made by South Africa asking the Court to visit the Territory of South West Africa.³⁹ Secondly, where the Court has played an inactive role in obtaining evidence by its own initiative, there is less likelihood of *proprio motu* site visits. The costs of any logistical arrangements that may be incurred during a visit may also be a deterrent factor. To avoid those difficulties, the parties should negotiate with a view to agreeing on the arrangements before proposing them to the Court, as was done in the *Gabčíkovo-Nagymaros* case. Thus, the most important factor of the site visit is the cooperation of all the parties, including the dispute settlement bodies themselves.⁴⁰ In addition, the Court needs to change its mindset in relation to on-site investigations in those international environmental cases which involve complex facts. It is doubtless true that this issue depends on the discretion of the Court, as it decided in the *Land, Island and Maritime Frontier Dispute* to reject the request of El Salvador to visit the disputed area because it was unnecessary to do so.⁴¹

2.2.3 Enhancing the Use of Court-Appointed Experts

As has been explained in the chapter 4, there have been criticisms of the reluctance of the ICJ, especially in the *Gabčíkovo-Nagymaros* case and the *Pulp Mills* case, to appoint experts to provide scientific or technical assessment of the evidence presented by the parties so to assist judges in fulfilling their judicial function.⁴² The ICJ or the ITLOS may *proprio motu* set up an inquiry commission of experts with a view to the obtaining and assessing of evidence. For the ICJ, Article 50 of the Statute may be used as a basis for it to establish such a commission.⁴³ Scholars⁴⁴ and even judges⁴⁵

³⁹ *South West Africa cases (Ethiopia v. South Africa; Liberia v. South Africa)* (Order) [1965] ICJ Rep, 9-10. See also the *Diversion of Water from the Meuse* where the proposal made by Belgium was not opposed by the Netherlands, so that the site visit did take place, see *Diversion of Water from the Meuse (The Netherlands v. Belgium)*, 1937 PCIJ (Ser. A/B) No 70, 9.

⁴⁰ Rosenne (n 34) 473. In the *Indus Waters Kishenganga Arbitration*, Pakistan and India agreed that 'it would be desirable for the Court of Arbitration to conduct a site visit', *Indus Waters Kishenganga Arbitration*, para. 22.

⁴¹ *Land, Island and Maritime Frontier Dispute (El Salvador v. Honduras: Nicaragua intervening)* (Judgement) [1992] ICJ Rep 351, 361-362.

⁴² See chapter 4, section 2.2.2.

⁴³ The equivalent provision for the ITLOS is Art. 289 of UNCLOS.

⁴⁴ Malgosia Fitzmaurice, 'Equipping the Court to Deal with Developing Areas of International Law: Environmental Law' in Connie Peck and Roy S. Lee (eds), *Increasing the Effectiveness of the*

concur that the role of court-appointed experts needs to be enhanced and there should be much more use of them for the sake of rendering a more informed judgment.⁴⁶

The details of how a commission of experts should carry out its tasks must be determined by the Court itself, as provided in Article 67 of the Rules of the Court. Contrary to *in situ* inspections, in which the judges directly visit the place, the Court may appoint one or several experts to visit the place, as it did in the *Corfu Channel* case.⁴⁷ In this case a Committee of Experts had been formed to, *inter alia*, visit on behalf of the Court. Apart from visiting the site, several tasks were entrusted to this Committee, such as making an examination of information and documents. Article 67 is wide enough to enable the Court to lay down the procedure to be followed by a commission. This means that the subject of the inquiry or the questions that the Court would like to know can be framed. For international environmental disputes, the Court could entrust a commission to examine, for example, the adverse impact of particular activities on the environment or natural resources, and both monetary and non-monetary damages arising from a breach of international environmental obligations. Experience regarding the examination of claims for loss and damage was evinced also in the *Corfu Channel* case when the Court made use of Article 50 to examine the amount of compensation claimed by the UK for the loss of its ships named the *Saumarez* and the *Volage*. The Court explicitly accepted that this ‘raised questions of a technical nature’.⁴⁸ There would be no difficulty for the Court in relying on this precedent in a case where one party requests the Court to adjudge and declare the amount of compensation arising from environmental loss. In addition, to prevent the accusation of being procedurally unfair, the Court should state in its order that the parties have a right to comment in writing on the report submitted by the experts. Another solution may be that the Court may give an opportunity to each party to suggest or nominate members of the commission of experts. This approach would enable all the parties to take part in the process of forming a commission and thus the opinions of the experts that appear in the report of a commission may be

International Court of Justice: Proceedings of the ICJ/UNITAR Colloquium to Celebrate the 50th Anniversary of the Court (Martinus Nijhoff Publishers 1997); Boyle and Harrison (n 1) 271.

⁴⁵ See *Pulp Mills* case, Joint Dissenting Opinion of Judges Al-Khasawneh and Simma, paras. 8-9.

⁴⁶ Caroline E. Foster, ‘New Clothes for the Emperor? Consultation of Experts by the International Court of Justice’ (2014) 5 JIDS 139, 161.

⁴⁷ *Corfu Channel* case (*UK v. Albania*) (Order) [1948] ICJ Rep 124.

⁴⁸ Ibid, 237 and 238. See Pierre d’Argent, ‘Reparation and Compliance’ in Karine Bannelier, Theodore Christakis and Sarah Heathcote (eds), *The ICJ and the Evolution of International Law: the Enduring Impact of the "Corfu Channel" Case* (Routledge 2012) 340.

unchallengeable in the sense that the parties themselves have selected the members of the commission.

Apart from Article 50, which is concerned specifically with the appointment of non-State entities to carry out the task of carrying out an enquiry or giving an expert opinion, one should not forget Article 48 of the Statute which has much wider scope than Article 50. Article 48 is an all-embracing provision that allows the Court to ‘make orders for the conduct of the case... and to make all arrangements connected with the taking of evidence’. This means that the Court enjoys considerable discretion in relation to the ways of gathering evidence, including inventing any mechanisms to assist the judges in evaluating the evidence. Many such ways have been proposed, such as the establishment of an *ex curia* expert’s group,⁴⁹ holding a conference where both the parties’ experts convene together and answer questions asked by the Court,⁵⁰ creating a pre-trial procedure to deal specifically with scientific issues with the experts chosen by the ICJ.⁵¹

Yet, the Court has made use of a phantom expert, experts consulted privately by the Court, to advise judges with regard to scientific and technical issues.⁵² However, such practices lack transparency and openness in the sense that the parties cannot cross-examine the experts who advise the judges behind the bench.⁵³ For this reason, the use of court-appointed experts should be promoted and, for the sake of transparency, such experts under Article 50 should be subjected to the scrutiny of the parties either by way of making comments or by challenging the correctness of the information on which the experts relied in providing the Court with an opinion.⁵⁴ It is possible that the experts may be cross-examined by the parties in the oral proceedings.

⁴⁹ Francesca Romanin Jacur, ‘Remarks on the Role of *Ex Curia* Scientific Experts in International Environmental Disputes’ in Nerina Boschiero and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013) 452.

⁵⁰ Philippe Sands, ‘Science and International Litigation’ in Denis Alland and others (eds), *Unité et Diversité du Droit International: Écrits en l’Honneur du Professeur Pierre-Marie Dupuy* (Martinus Nijhoff Publishers 2014) 903.

⁵¹ Daniel Peat, ‘The Use of Court-Appointed Experts by the International Court of Justice’ (2014) 84 *British Ybk Intl L* 271.

⁵² See the details in chapter 4, section 2.2.2.

⁵³ Panos Merkouris, ‘Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay): Of Environmental Impact Assessments and “Phantom Experts” ’ 11, available at <http://www.haguejusticeportal.net/Docs/Commentaries%20PDF/Merkouris_Pulp%20Mills_EN.pdf> accessed 19 June 2016.

⁵⁴ See Guillaume Gros, ‘The ICJ’s Handling of Science in the Whaling in the Antarctic Case: A Whale of a Case?’ (2015) 6 *JIDS* 578, 590.

Judge Simma stresses the importance of having an independent expert that

‘in environmental cases in which impacts on human life and health, the survival of species, or intergenerational consequences are involved, the more such cases have to do with “real people”, the more the Court ought to play a stronger role with regard to seeking assistance by independent expertise.’⁵⁵

2.3 Addressing the Problem of Litigating Multilateral Environmental Disputes

The truism that the procedures of international courts are bilateral in their nature may create some difficulties in finding ways in which multilateral environmental disputes can fit neatly into the bilateral structure of dispute resolution. Due to the fact that one cannot change the nature of the ICJ and the ITLOS, the proposals made in this section are limited to the attitude of the judges towards multilateral environmental disputes and the Statutes and Rules of Procedure of the ICJ and the ITLOS rather than proposing to overhaul the whole structure of the process of international litigation.⁵⁶

As was mentioned in earlier chapters, there may be situations where a breach of the environmental obligations set out in a particular treaty by one State may impact on *more than one State*, or sometimes those States may have suffered no injury from such a breach but they have a common interest in maintaining the integrity of a treaty aiming at protecting the environment or natural resources.⁵⁷ In the latter situation the question arises as to which States may bring a case to international courts? In recent years, the ICJ, notably in the *Belgium v. Senegal* case, has accepted that any State party to a treaty containing obligations that could be qualified as *erga omnes partes* may invoke the responsibility of another State party.⁵⁸ In addition, although in the *Whaling* case the ICJ did not express any view explicitly about the *erga omnes partes* obligations set out in the ICRW, it simply proceeded on the basis that Australia has *locus standi* to bring a case against Japan without the need for Australia to

⁵⁵ Bruno Simma, ‘The International Court of Justice and Scientific Expertise’ (2012) 106 ASIL Proceedings 229, 232-233.

⁵⁶ For *ad hoc* arbitration, the parties could choose suitable procedures for multilateral environmental disputes, such as the PCA Environmental Rules. See chapter 4, section 2.1.1.

⁵⁷ See chapter 2, section 3.1.2.

⁵⁸ *Belgium v. Senegal* case, para. 69.

demonstrate that it had suffered any injuries from the hunting of whales.⁵⁹ This can be viewed as a good sign in that the Court may interpret the other MEAs by assuming that their objective is to protect the community interest in the same way as the Court did in the *Whaling* case. Nonetheless, the Court, in those two cases, did not touch upon the nature of international environmental law. In the first case, the Court dealt with the Convention against Torture and in the second case—although the ICRW is a convention aimed in part at the preservation of whales—it did not expressly pronounce on the nature of the Convention as to whether or not it contains *erga omnes partes* obligations. What can be proposed is the need to urge the Court to thoroughly consider the nature of the conventions relating to the environment, taking the jurisprudence in these two cases into account, as well as the obligations that are claimed to have been breached, and it should treat all MEAs as having *erga omnes partes* environmental obligation, thus providing that all the States parties have an interest in each State's compliance.⁶⁰

Another question is that: how to bring all possible parties to a dispute into dispute resolution processes? There are two possible ways of handling the participation of other States which have an interest in protecting the environment that may increase the Court's credibility when it has to deal with multilateral environmental disputes. There is the possibility of broadening participation by means of intervention. The proposals below can be applied to both the ICJ and the ITLOS but the discussion will focus mainly on the jurisprudence and the ICJ Statute, since there have been no cases brought before the ITLOS and the provisions on intervention under the ITLOS Statute were drafted in the same manner as in the ICJ Statute.

For the ICJ, it should establish whether all those States can satisfy the Court that they have 'an interest of a legal nature that may be affected by the decision in the

⁵⁹ See Yasuhiro Shigeta, 'Obligation to Protect the Environment in the ICJ's Practice: To What Extent Erga Omnes?' (2012) 55 Japanese Ybk Intl L 176, 206.

⁶⁰ See also Art. 48 of the ILC's Draft Articles on State Responsibility and *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011) ITLOS, Seabed Disputes Chamber, para. 180. See also Art. 4 of the Resolution concerning obligations *erga omnes* in international law which provides that 'The International Court of Justice or other international judicial institution should give a State to which an obligation *erga omnes* is owed the possibility to participate in proceedings pending before the Court or that institution and relating to that obligation': The Institute of International Law, Fifth Commission, (Krakow Session 2005), Rapporteur: Giorgio Gaja, reprinted at <http://www.justitiaetpace.org/idiE/resolutionsE/2005_kra_01_en.pdf> accessed 5 June 2016.

case' under Article 62 of the ICJ Statute⁶¹ or whether they are States parties which would like to interpret a treaty under Article 63.⁶² Intervention under Article 62 within the environmental context is sparse. The Court, both in the 1974 and the 1995 *Nuclear Test* cases, did not consider the issue of intervention requested by Fiji as a consequences of its decision in the principal cases,⁶³ and, also, in the second case it dismissed the requests of Australia, the Solomon Islands, the Federated States of Micronesia, the Marshall Islands and Samoa to intervene because it lacked jurisdiction to decide the 1974 Judgment.⁶⁴ The Court needs to change the mindset it has adopted with regard to multiple party international environmental litigation and it should promote a wider use of such provisions by taking a more liberal or less stringent approach towards the issue of intervention, especially in relation to Article 62.⁶⁵ The most important thing is that the Court, as Chinkin claims, needs 'to find a balance between not allowing third parties to intrude unnecessarily in litigation between other States, while not permitting States to ignore legitimate third party claims in their litigation'.⁶⁶ What the Court should do in order to strike such a balance is to clearly pronounce 'a rational and coherent statement as to when third party claims will be allowed'.⁶⁷ To this end, the Court should elaborate the criteria clarifying what is meant by 'an interest of a legal nature' in environmental matters that States need to prove in order to intervene under Article 62 in the case as it did in more recent cases related to non-environmental matter.⁶⁸ This is because it is not clear that if a State that wishes to intervene in a case, it can invoke Article 62 by claiming that since *erga omnes* obligations have been breached its request would fall within the scope of the meaning of 'the interest of a legal nature' which may be affected by a decision. It might be useful if such criteria were developed by using the notion of injured State provided in Article 42 (b) (ii) of the ILC's Articles on States

⁶¹ See also Art. 31 of the ITLOS Statute and Art. 99 of the ITLOS Rules.

⁶² See also Art. 32 of the ITLOS Statute and Art. 100 of the ITLOS Rules.

⁶³ 1974 *Nuclear Tests* case, (Application by Fiji for Permission to Intervene) [1973] ICJ Rep 535.

⁶⁴ 1995 *Nuclear Tests* case, para. 65.

⁶⁵ Chinkin asserts that 'the ICJ has not enunciated any very clear policy on third party intervention but the undeniable trend of its jurisdiction has been towards restriction and containment within tight although not precisely defined limits' see Christine Chinkin, 'Intervention Before the International Court of Justice' in Friedl Weiss (ed), *Improving WTO Dispute Settlement Procedures: Issues and Lessons from the Practice of Other International Courts and Tribunals* (Cameron May 2000) 117.

⁶⁶ Christine Chinkin, *Third Parties in International Law* (Clarendon Press 1993) 149.

⁶⁷ Ibid, 149.

⁶⁸ See the cases law on intervention such as *Territorial and Maritime Dispute case (Nicaragua v. Colombia)* (Application by Costa Rica for Permission to Intervene) (Judgement) [2011] ICJ Rep 348 and *Jurisdictional Immunities of State (Germany v. Italy)* (Application by the Hellenic Republic for Permission to Intervene) [2011] ICJ Rep 494.

Responsibility as a possible guideline in order to protect a collective interest should the obligations that have been breached are owed to a group of States or the international community as a whole and that State's position and that of its fellow parties must have been radically changed.⁶⁹ Consequently, all States parties to 'certain regimes for the protection of the environment',⁷⁰ for instance, the Kyoto Protocol, CBD, UNCLOS (with regard to the common heritage of mankind) and ICRW might be entitled to intervene in a case.⁷¹

In addition to Article 42 (b) (ii), the criteria for intervention might also be derived from Article 48 of the ILC's Articles on States Responsibility for States other than the injured State. After the *Whaling* case was rendered, there might be some possibility to expand the scope of intervention under Article 62 so as to include community interest of a legal nature. The fact that Australia sued Japan in the ICJ without being injured from any injuries opens the way for the ICJ to reverse its restrictive application of Article 62 towards a more liberal approach to intervention. That is to say, since Australia could have standing to bring the dispute to the ICJ without the need to show its specific individual interest in the main case, there is no reason for the Court to refuse a request to intervene of other States—which involves a procedure incidental the main case—on the ground that they has not demonstrated the precise legal claims to protect the community interest or being too remote and general. The operative part and the reasoning of a Judgment concerning the protection of the environment may also affect the rights of the third State to the same extent as the original parties capable of justifying intervention under this Article.⁷² This interpretation could facilitate the State that wishes to act on behalf of the international community which, as Crawford says: 'should not be hindered by procedural technicalities. Better to give states standing in court to protect what they perceived as

⁶⁹ Art. 42 (b) of the ILC's Draft Articles.

⁷⁰ James Crawford, *State Responsibility: The General Part* (CUP 2013), 547.

⁷¹ In the context of the law of the sea see Philippe Gautier, 'Standing of NGOs and Third-Party Intervention before the International Tribunal for the Law of the Sea' (2014) 1 RBDI 205, 222; Philippe Gautier, 'Locus Standi and Breaches of the United Nations Convention on the Law of the Sea: Some Reflection in Light of the Decision of the ICJ in the Case Concerning Questions Relating to the Obligation to Prosecute or Extradite (Belgium vs Senegal)' in Roman Anatol'evič Kolodkin and Anatolij L. Kolodkin (eds), *Международное морское право: статьи памяти АЛ Колодкина : International Law of the Sea: Essays in Memory of Anatoly L Kolodkin* (Статут Москва 2014) 138.

⁷² See, however, the view that Art. 62 cannot be used to uphold the community interests in Rüdiger Wolfrum, 'Interventions in Proceedings Before International Courts and Tribunals: To What Extent May Interventions Serve the Pursuance of Community Interests?' in Nerina Boschiero and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013) 229; Paolo Palchetti, 'Opening the International Court of Justice to Third States: Intervention and Beyond' (2002) 6 Max Planck UNYbk 139, 180-181.

global values than to leave them only with non-judicial means of dispute settlement'.⁷³

The aforesaid intervention is distinguishable from an intervention under Article 63 where a State only needs to show that it is a party to a multilateral convention and it wishes to present to the Court its observations in relation to the interpretation of the convention where the original parties had different legal opinions on how to interpret relevant provisions. This provision can be used, and should be promoted to use, as a remedy for the shortcoming of bilateral nature of the ICJ. In the *Whaling* case, New Zealand, as one of the parties to the ICRW, filed a declaration of intervention under Article 63 to intervene in the *Whaling* case with a view to presenting its interpretation of Article VIII of the ICRW. The Court decided that the intervention was admissible.⁷⁴ It should be noted, however, that the intervention of New Zealand did not allow it to become a party to the proceedings and this is clear in the declaration where it is stated that it did not seek to become a party.⁷⁵

Intervention under Article 63 does not allow a third State to become one of the parties to the proceedings and it may not participate in the case as a party 'on an equal footing with the original litigant State, nor as an applicant or respondent or even as an independent claimant'⁷⁶ but this Article offers, at least, a channel for the other parties to a particular multilateral convention to present their views in relation to how a provision in the convention should be interpreted. This is of importance for multilateral treaties, not only multilateral environmental treaties in particular but multilateral treaties in general, since the texts contained therein may be concluded as a result of compromises that have been made during the negotiations. Different interpretations by the parties may emerge later after the conclusion of the negotiations so, when a dispute is put before the Court, as Chinkin states, 'the parties to a convention the construction of which is in issue should be given an opportunity to express their preferred interpretation to the Court'.⁷⁷

Judge Trindade has vigorously commented in his separate opinion in the *Whaling* case on the resurrection of the Article concerning intervention in which he

⁷³ Crawford (n 70) 368.

⁷⁴ *Whaling* case, (Order of 6 February 2013) [2013] ICJ Rep 3.

⁷⁵ *Whaling* case, Declaration of Intervention of the Government of New Zealand, para. 9.

⁷⁶ Shigeru Oda, 'The International Court of Justice viewed from the Bench (1976-1993)' (1993) 244 *Recueil des Cours* 9, 78.

⁷⁷ Christine Chinkin, 'Article 63' in Andreas Zimmermann and others (eds), *The Statute of the International Court of Justice: A Commentary* (2 edn, OUP 2012) 1597.

was in favour of using Article 63 as a tool to overcome the ‘old bilateralist bias’⁷⁸ which is deeply-rooted in the dispute settlement procedures of the ICJ. This is of particular importance for those treaties which are concerned with collective interests in which other parties than those involved in the proceedings can voice their views to the Court. He makes an observation that the ICRW is concerned with ‘a matter of general or common interest, and is to be implemented collectively by States parties’. For this reason, in his view, ‘the resurgence of intervention is thus most welcome’⁷⁹ and it ‘has at last seen the light of the day’.⁸⁰

There is another benefit of intervention under both Article 62 and 63, even unsuccessful. Chinkin is of the view that intervention has been a ‘successful and worthwhile strategy’: even where requests are not granted, it can, at least, raise awareness about the importance about the dispute at hand to the Court and gain media attention. For instance, four South Pacific States could show their stance and dissatisfaction regarding France’s nuclear tests.⁸¹ In addition, as the Court held in the *Libya v. Malta Continental Shelf* case⁸² and the *Territorial and Maritime Dispute* case,⁸³ it still may, if it rejects the request to intervene, take into account, as a fact, the relevant information submitted by the unsuccessful States seeking permission to intervene.⁸⁴

2.4 Addressing the Problem of Ambiguous Environmental Judgments/Awards

This is a case where the parties bring the case to an arbitral tribunal, the ICJ or the ITLOS and they do not clearly pronounce on what is expected of the future conduct of the parties or where the judgment is open-ended, as shown in the *Gabčíkovo-*

⁷⁸ *Whaling* case, Separate Opinion of Judge Trindade, para. 71.

⁷⁹ *Ibid*, para. 68.

⁸⁰ *Ibid*, para. 66.

⁸¹ Chinkin, *Third Parties in International Law* (n 66) 113.

⁸² *Case concerning the Continental Shelf case (Libyan Arab Jamahiriya v. Malta)* (Application by Italy for Permission to Intervene) (Judgement) [1984] ICJ Rep 3, para. 43.

⁸³ *Territorial and Maritime Dispute case (Nicaragua v. Colombia)* (Application by Costa Rica for Permission to Intervene) (Judgement) [2011] ICJ Rep 348, para. 51.

⁸⁴ Some Judges suggest that the Court should establish a new mechanism to deal with this kind of information. For instance, Judge Gaja suggested that ‘the Court should establish a new procedural mechanism short of intervention that would allow third States to submit information which they consider useful in order to protect their interests of a legal nature’: see Declaration of Judge *ad hoc* Gaja in *Territorial and Maritime Dispute case (Nicaragua v. Colombia)* (Application by Costa Rica for Permission to Intervene) (Judgement) [2011] ICJ Rep, para. 5. See also Dissenting Opinion of Judge Donoghue in *Territorial and Maritime Dispute case (Nicaragua v. Colombia)* (Application by Honduras for Permission to Intervene) (Judgement) [2011] ICJ Rep, para. 59.

Nagymaros case, which is the only environmental example that the author knows of.⁸⁵ The proposal will focus on the question of how the other modes of dispute resolution can be useful in handling the situation apart from asking the ICJ or ITLOS to interpret a judgment.⁸⁶

The proposal is that a third-party non-judicial mechanism could be resorted to by the parties using the findings of a judicial body as the basis of a settlement.⁸⁷ Given that an ambiguous pronouncement of them is hard to implement, the parties should refocus their attention from ‘the result of execution *stricto sensu* to the process of negotiation related thereon’.⁸⁸ That is to say, the judgment or award may be used as a framework for a third-party (mediator or conciliator). They can also provide the parties with proposals which are based, to some extent, on the judgment. Thus, diplomatic means may provide a way in which the overall dispute can be further settled. As Boisson de Chazournes and Angelini rightly say, ‘the ‘diplomatic component’ compensates for the partial scope of the pronouncement by embedding part of its content, or at least its spirit, in the settlement of aspects not adjudicated by the Court’.⁸⁹

As elaborated in chapter 5, the ICJ in the *Gabčíkovo-Nagymaros* case did not address the future operation of the Project, therefore third party diplomatic means could be used to find the way forward if the parties think that the time to make compromise has arrived. For example, when the Court mentioned to the right to an equitable and reasonable share of the waters,⁹⁰ implementation of this principle would need to take various factors, including non-legal factors, such as social and economic needs.⁹¹ Conciliators, for example, could also provide concrete proposals to overcome the stalemate so as to allow the project to continue while taking the environmental

⁸⁵ See the details in chapter 5, section 2.1.4.1 (2).

⁸⁶ See Art. 60 of the ICJ Statute and Art. 33 (3) of the ITLOS Statute.

⁸⁷ Laurence Boisson de Chazournes and Antonella Angelini, ‘After “The Court Rose”: The Rise of Diplomatic Means to Implement the Pronouncements of the International Court of Justice’ (2012) 11 LPICT 1, 21. Paulson states about the implementation of the Judgment in the *Gabčíkovo-Nagymaros* case that ‘Answering the legal question may have been an important step toward settlement, but the parties have been unable to use the Judgment to resolve their differences’ see Colter Paulson, ‘Compliance with Final Judgments of the International Court of Justice Since 1987’ (2004) 98 AJIL 434, 449. Also, Llamzon is of the view that ‘there is basis to question whether the Court provided the parties with enough guidance for effective resolution to occur’ see Aloysius P. Llamzon, ‘Jurisdiction and Compliance in Recent Decisions of the International Court of Justice’ (2007) 18 EJIL 815, 845.

⁸⁸ Boisson de Chazournes and Angelini, ‘After “The Court Rose”: The Rise of Diplomatic Means to Implement the Pronouncements of the International Court of Justice’ (n 87) 20.

⁸⁹ Ibid, 20.

⁹⁰ *Gabčíkovo-Nagymaros* case, para. 85.

⁹¹ Art. 6 (1) (b) of the Watercourses Convention.

concerns and principle of equitable and reasonable use seriously. This would make the proposals of the conciliator much more solid, since this would be supported by the authoritative pronouncements of the ICJ. In addition, as McCaffrey states, equitable utilisation is a dynamic process depending heavily on active cooperation between riparian States,⁹² this is perfectly matching the function of non-judicial mechanisms in that the latter could employ various techniques for cooperation between disputants in adjusting and balancing competing interests. Also, the conciliators could take certain aspects into account, such as economic or social considerations, that have not been addressed judicially in the adjudication. In the light of this approach, diplomatic means could play a supportive role in that they could add value to an unclear pronouncement of a court or an arbitral tribunal.

3. PROPOSALS FOR ADDRESSING THE WEAKNESS OF NON-COMPLIANCE PROCEDURES

There is a problem of the unclear relationship between NCPs and traditional dispute settlement mechanisms. The difficulties that may arise is that: if a State decide to bring an international environmental dispute before both NCPs and judicial means which require them to consider the same set of facts, what is the relationship between these mechanisms? what do they have to do if this situation arise?

Commonly for MEAs in which NCPs are established to supervise the compliance of States parties, there is a ‘without prejudice’ clause containing a phrase indicating that the procedures relating to compliance shall operate without prejudice to the traditional modalities of dispute settlement, for example international courts or arbitration, as well as non-judicial means.⁹³ Given that the relationship between NCPs and traditional means is far from clear, since practice in this matter is rare, the proposal in this section is merely based on a speculative theoretical idea of how this clause could be interpreted properly with a view to mingling all the means of dispute settlement harmoniously.

The proposal here is that the ‘without prejudice’ clauses should be interpreted in a collaborative manner. It has been suggested that recourse to an NCP should be viewed as a precondition to seizing the jurisdiction of international courts over a dispute, similar to the requirement that negotiations should normally have been

⁹² Stephen McCaffrey, *The Law of International Watercourses* (2 edn, OUP 2007) 405.

⁹³ See for example Part XVI of the Kyoto NCP.

exhausted before litigating a case before judicial means. This suggestion has been put forward by Boyle and Harrison who argue that ‘a court might then be invited to dismiss proceedings at the admissibility stage where there has been no attempt to settle the matter through the NCP’.⁹⁴ This proposal seems to deny the idea that non-compliance procedures and traditional dispute-settlement procedures can be instituted in parallel, which is, in theory, contrary to how the ‘without prejudice’ clause is meant to function. In addition, this idea suggests that an NCP would always have priority over judicial means. It is not incorrect to give such an interpretation in that way but the dismissal of a case should be confined to certain conditions. For example, judicial bodies might be invited to dismiss proceedings where there is a provision in the MEA concerned allowing judicial bodies to do so, otherwise parallel procedures should always be possible.⁹⁵ The absence of such a provision either in an MEA or the procedures relating to non-compliance could not prevent international courts from judging a case. Nonetheless, one might be concerned that the parallel procedures could cause conflicts of decisions arising from the varying application of international environmental law. To prevent this from happening dispute settlement bodies should suspend proceedings with a view to waiting for the result of a pending non-compliance procedure before continuing the proceedings rather than dismissing the case on the basis that the NCPs have not yet been exhausted.

When dispute settlement bodies decide cases in which non-compliance bodies have already given their findings, assuming that the latter found that a State had not complied with its environmental obligations, dispute settlement bodies could take into account the findings of NCPs which can be used to help them to interpret and apply the MEA at issue. There are three possible ways in which they could do so.

A first possibility is that a court could treat the findings of a non-compliance body as ‘subsequent practice in the application of the treaty which establishes the agreement of the Parties regarding its interpretation’ which international courts or tribunals may take into account in accordance with Article 31 (3)(b) of the Vienna Convention on the Law of Treaties (VCLT).⁹⁶ Subsequent practice in this case is obvious and it is related directly to the interpretation of conventional provisions made

⁹⁴ Boyle and Harrison (n 1) 261.

⁹⁵ It should be noted that, in practice, no such provisions exist in MEAs.

⁹⁶ Tullio Treves, ‘The Settlement of Disputes and Non-Compliance Procedures’ in Tullio Treves and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C. Asser Press 2009) 508-509.

by the political plenary organ which carry considerable weight.⁹⁷ Since COPs/MOPs are composed of all those States that are parties to a particular convention, the decisions adopted by them are good evidence of how the States parties interpret their convention. Usually, one of the important functions of COPs/MOPs is to supervise the implementation of the MEA by the States parties and they can use their decision-making power to consider the issue of non-compliance which, mostly, has been investigated and determined by subsidiary bodies, namely compliance committees, before making recommendations and reporting to COPs/MOPs. The adoption of a compliance committee's decisions by the COPs/MOP provides more solid ground for such decisions to become the subsequent practice of the Parties. As Tanzi and Pitea also stated in the context of the Aarhus Convention, 'any decision by the Aarhus Convention Compliance Committee, when it is backed by the MOP through adoption by consensus, may be considered as falling within the concept of "subsequent practice"'.⁹⁸ Such an interpretation can be considered as an authoritative determination of the issue of non-compliance, although the findings are not binding and only have a recommendatory character.⁹⁹ The interpretative value of non-binding recommendations has been confirmed by the ICJ in the *Whaling* case when it held that the recommendations adopted by the International Whaling Commission (IWC) 'when they are adopted by consensus or by a unanimous vote, they may be relevant for the interpretation of the Convention or its Schedule'.¹⁰⁰ Although the case was not concerned with the NCPs, the adoption of recommendations by the IWC is comparable to the way in which COPs/MOPs adopt their own decisions. That is to say, the IWC is also the supreme decision making body that is composed of one member from each of the Contracting Governments. With this confirmation, international courts would not have any difficulties in taking into account decision of

⁹⁷ Ulrich Beyerlin, Peter-Tobias Stoll and Rüdiger Wolfrum, 'Conclusions Drawn from the Conference on Ensuring Compliance with MEAs' in Ulrich Beyerlin, Peter-Tobias Stoll and Rüdiger Wolfrum (eds), *Ensuring Compliance with Multilateral Environmental Agreement: Academic Analysis and Views from Practice* (Martinus Nijhoff Publishers 2006) 369.

⁹⁸ Attila Tanzi and Cesare Pitea, 'The Interplay between EU Law and International Law Procedures in Controlling Compliance with the Aarhus Convention by EU Member States' in Marc Pallemerts (ed), *The Aarhus Convention at Ten: Interactions and Tensions Between Conventional International Law and EU Environmental Law* (Europa Law Publishing 2011) 380.

⁹⁹ Jorge E. Viñuales is of the opinion that the decisions of COPs 'could be treated as subsequent practice of relevance for the interpretation of the binding provisions' Jorge E. Viñuales, *Foreign Investment and the Environment in International Law* (CUP 2012) 275. See also Geir Ulfstein, 'International Framework for Environmental Decision-Making' in Malgosia Fitzmaurice, David M. Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010) 33.

¹⁰⁰ *Whaling* case, para. 46.

COPs/MOPs which have been adopted by consensus or by a unanimous vote with regard to non-compliance issues.¹⁰¹

A second possibility is that the findings of an NCP committee may be taken into account by judicial bodies as ‘relevant rules of international law applicable in the relation between the parties’ as set out in Article 31 (3)(c) of the VCLT. According to Tullio Treves, such findings can be classified as ‘normative material’ which has a soft law character.¹⁰² It should be noted that the non-binding character of the findings would not impede judicial bodies from using the findings as a tool to assist them in deciding the case.¹⁰³ The practice of using non-binding documents can be seen in the jurisprudence of the European Court of Human Rights (ECtHR) when interpreting the European Convention on Human Rights (ECHR) which confirms that the Court does not confine itself to legally binding instruments but takes a less restrictive approach.¹⁰⁴ The ECtHR has used, for example, ‘non-binding instruments of Council of Europe organs, in particular recommendations and resolutions of the Committee of Ministers and the Parliamentary Assembly’ for the purpose of interpreting the ECHR.¹⁰⁵

A third possibility is that the findings may be used by judicial bodies as a source of reliable factual evidence.¹⁰⁶ The reason why the findings of NCPs are reliable may be explained by the fact that the process of determining the question of non-compliance is conducted in a systematic way guaranteed by due process, fairness and transparency by the independent organ which is established by the will of all the parties as a part of functioning of MEAs. The findings are also set out in an official document which has been thoroughly considered in a way similar to the proceedings of international courts. Thus, there is no reason not to believe in the accuracy of the

¹⁰¹ Ibid, para. 83 where the Court stresses that the IWC resolutions need to be supported by all States parties to the Convention, otherwise such instruments ‘cannot be regarded as... subsequent practice establishing an agreement of the parties regarding the interpretation of the treaty within the meaning of subparagraph... (b)... of paragraph (3) of Article 31 of the Vienna Convention on the Law of Treaties’

¹⁰² Treves (n 96) 508.

¹⁰³ Compare this matter with the non-binding nature of relevant rules of international law because those rules have not yet been ratified, discussed in *OSPAR Arbitration*, the Dissenting Opinion of Gavan Griffith, paras. 9-19. See also *Southern Bluefin Tuna Cases*, (Provisional Measures), Separate Opinion by Judge Tullio Treves, para. 10.

¹⁰⁴ Oliver Dörr, ‘General Rule of Interpretation’ in Oliver Dörr and Kirsten Schmalenbach (eds), *Vienna Convention on the Law of Treaties: A Commentary* (Springer 2012) 564.

¹⁰⁵ See, for example, *Case of Demir and Baykaya v. Turkey* (Judgment) 12 November 2008, paras. 74-75.

¹⁰⁶ See Ruth MacKenzie, ‘The Role of Dispute Settlement in the Climate Change’ in Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (CUP 2012) 404.

information that the judicial bodies might get from the findings. The converse is, of course, also possible, namely that non-compliance bodies can also take into account the decisions of dispute settlement bodies as highly persuasive information and use them as a basis for making their findings.

4. PROPOSALS FOR ADDRESSING THE WEAKNESS OF RFMO PANELS

Past experience of this kind of dispute settlement is very limited, since there has so far been only one case. The lack of cases makes it difficult to develop proposals for dealing with the shortcomings of RFMO panels. Therefore, the provisions concerning review panels or *ad hoc* panels that stipulate, for example, their functions and the ways to conduct the process of dispute settlement, are the main sources which can be used for proposing any recommendations.

It is common for the constituent treaties of RFMO conventions to establish such a panel as an alternative means for the parties to choose to settle certain types of dispute and the details of how the panel procedures are to be conducted are usually set out in an Annex to an RFMO convention. What can be seen in terms of the rules concerning procedure are that some RFMOs conventions, namely the revised NAFO Convention and the WCPF Convention, provide that the panels shall determine their own rules of procedure for the purpose of achieving expeditious proceedings.¹⁰⁷ It can be understood and implied that the only reason for laying down these procedures is the necessity of the rapidity of the proceedings, which seems to exclude any other reasons which the panel might deem necessary to enhance its capacity to provide good quality decisions. Indeed, effective dispute settlement depends partly on the speediness of the proceedings but the other procedural aspects should not be overlooked. One suggestion in this respect may be that any rules of procedure governing the proceedings which may be drafted in the future (or, if possible, amending the existing rules) should not specify the objective of drafting the procedure, as in the case of the SPRFMO Convention which broadly stipulates that ‘the Review Panel shall determine its own rules of procedure’ without requiring a

¹⁰⁷ See Rule 9 of Annex II to the revised NAFO Convention, which stipulates that ‘the *ad hoc* panel may adopt any rules of procedures, *which it deems necessary to accelerate the proceedings*’ (emphasis added) and Rule 4 of Annex II to the WCPF Convention, which states that ‘the review panel shall determine its own procedures, *providing for the expeditious conduct of the hearing* and assuring to the applicant or applicants full opportunity to be heard and to present its or their case’ (emphasis added).

specific purpose.¹⁰⁸ This would allow the Review Panel to have broad discretion in determining its rules of procedure in every detail, such as the appropriate measures to obtain information from various sources and to establish facts (such as the admissibility of information submitted by NGOs or international organisations and the issue of hearing evidence), the appointment of independent experts to assist the panel and the approach (whether inquisitorial or adversarial) which the panel may adopt to determine the resolution of the dispute. It should be noted, however, that although there is such a provision in the SPRFMO, the Procedural Directive No.1 which the Review Panel adopted in the *Trachurus murphyi* case deals with no more than administrative issues, including the substance of written submissions, the form of written submissions, the language of written submissions and the notification of submissions.¹⁰⁹ One can also learn from a panel established under the NEAFC. Annex 1 allows the panel to use its discretion, since it explicitly provides that, in addition to the purpose of expeditious proceedings, the panel may adopt rules ‘that it considers necessary for *effective* proceeding’.¹¹⁰ What one would expect from procedural rules is that they should strike a balance between speed of the proceedings and their sound conduct.

Another problem that can be learnt from the *Trachurus murphyi* case is the about the powers of panels to decide conflicting facts. The panel did not determine whether or not Russia has actually caught the jack mackerel although all parties attempted to provide evidence about this issue.¹¹¹ This might be linked to the time limit laid down to decide the case where a huge amount of relevant information was presented. The fact that the panel has to give its finding and recommendations within 45 days after its establishment, might have forced the panel to leave some issues. The proposal that can be made here is that, for the sake of completeness in deciding a case, sufficient time must be devoted to examination of conflicting facts rather than proceeding very expeditiously.

¹⁰⁸ Rule 4 of Annex II to the SPRFMO Convention.

¹⁰⁹ *Trachurus Murphyi* case, Procedural Directive No.1, available at < http://archive.pca-cpa.org/20130607_Procedural_Directive_No.1_ENGdfee.pdf?fil_id=2268> accessed 6 June 2016.

¹¹⁰ See Section 8 of Annex 1 to the NEAFC Convention (emphasis added).

¹¹¹ See chapter 3, section 4.2.

CONCLUSIONS

The aim of the chapter is to propose the ways in which the shortcomings of each of the dispute settlement mechanisms identified in the chapters 4 and 5 as well as other lingering shortcomings that weren't mentioned in those chapters could be addressed. The proposals submitted in this chapter are ones that could be practically achieved, since they have a real possibility of their being implemented.

As far as non-judicial mechanisms are concerned, the proposals are based on the sound practice of international organisations such as the World Bank and the UNEP regarding the establishment of a roster of experts. This problem could be overcome by learning from the experiences of such organisations and using them as guidelines for addressing the problem of difficulty in selecting persons who will act as mediators, conciliators and fact-finders. Specialised mediators in the field of the environment are now provided by the UNEP.

For the ICJ and ITLOS, particular considerations were given to the existing provisions set out in their statutes and rules in order to determine the ways in which those provisions could be fully used by judges. International courts are faced with two obvious problems due to the nature of international environmental disputes. The first is complexity of the scientific and technical issues related to the protection of the environment to overcome this weakness the following measures are proposed: (1) drawing on the work of an existing inquiry commission with a view to combining it in the processes of dispute settlement in an integrated and complimentary manner, (2) enhancing the use of site visits and (3) enhancing the use of court-appointed experts. For the second problem, some international environmental disputes are concerned with the environmental interests of two or more States or the international community which in turn does not correspond to the nature of adjudication. These problems can be alleviated by enhancing the use of the provision relating to the intervention of other States that also have an interest in protecting the environment that is at issue in the case. A more liberal approach to intervention should be applied by the international courts. They need to elaborate the criteria that are applicable to a dispute that involves *erga omnes partes* obligations to protect the environment or natural resources.

For arbitration, the problem is concerned with the lack of mechanisms to induce compliance. The proposal brought forward here is to use the plenary organ, if it exists, of the MEAs as a possible mechanism to perform this function. NCPs or any

other institution established under particular MEAs could also undertake this function. For the ITLOS, the Meeting of States parties could probably put pressure non-complying States.

With regard to NCPs, the problem of unclear relationship between NCPs and traditional judicial means of dispute settlement was identified. The proposals are made on the basis of an interpretative approach for overcoming the problem of the unclear relationship between NCPs and the traditional means of dispute settlement mechanisms. That is to say that the 'without prejudice' clauses should be interpreted in a collaborative manner so as to make these two mechanisms work well together. In the case where a NCP is considering the same issue as judicial body, the latter should suspend its proceedings. NCPs' findings could be treated as subsequent practice or as relevant rules of international law when the international courts interpret and apply MEAs. With regard to the weight of factual evidence, judicial bodies might give much more weight to the information that has already been investigated by NCPs and treat it as reliable evidence.

For RFMO panels, the extremely rapid proceedings may seem to create problem in term of the establishment of the panel procedures and there being a sufficiency of time for the panels to evaluate the complex set of factual evidence. The proposals are brought forward to overcome the problem of what needs to be carried out for the purpose of achieving expeditious proceedings which is the suggestion of the need to take other factors into account when determining rules of procedures. Existing time limits may also need to be extended if panels are to examine a case thoroughly.

CHAPTER 7

CONCLUSIONS

This thesis aimed to provide the analysis of dispute settlement mechanisms in international law in settling international environmental disputes. The emphasis is on the portrayal of dispute settlement with the assistance of a third party as a decision-maker rather than attempting to resolve a dispute by means of negotiation. Environmental disputes, like any other dispute, have to be settled peacefully by the parties to a dispute. Settlement of a dispute is a complex process involving, for example, time and costs that the parties need to invest and pay for. International environmental disputes are no exception. A government needs to contemplate which forum would best suit its interests. After making a calculation, a government would ultimately choose the means that it prefers, either out-of-court or a rigid judicial dispute settlement. Whether or not to litigate can purely be a political decision.¹ Choosing the right forum for settling a dispute is always important as a commentator notes that ‘the use of an inappropriate means of settlement decisively diminishes the chances for the resolution of a dispute.’²

1. ANSWERS TO THE RESEARCH QUESTIONS

In order to find out which mechanism can provide for suitable and effective processes of dispute settlement or rules of procedures that could facilitate the settlement of international environmental disputes, this thesis set out four research questions. The answers can be summarised as follows:

¹ D.W. Bowett, ‘The Conduct of International Litigation’ in D.W. Bowett (ed), *The International Court of Justice: Process, Practice and Procedure* (BIICL 1997) 1.

² Nina Vajić, ‘Diplomatic Settlement or Adjudication? Advantages and Drawbacks’ in Lucius Caflisch (ed), *Règlement Pacifique des Différends entre États: Perspectives Universelle et Européenne = The Peaceful Settlement of Disputes between States: Universal and European Perspectives* (Kluwer Law International 1998) 23.

1) What is meant by an international environmental dispute and what are its characteristics?

Chapter 2 answered these research questions. As far as the definition of an international environmental dispute is concerned, we have seen that there are some difficulties in defining this term. This is because international disputes rarely revolve around a single issue and, according to past experience, environmental issues have always been part of the whole dispute that was submitted to the decision-making bodies.³ As was shown in the *Gabčíkovo-Nagymaros* case, the environmental concern was one part of the dispute which Hungary invoked in order to terminate the Treaty obligating it to construct the dam. In addition, in the *Certain Activities/Construction of a Road* cases, environmental concerns were raised in parallel with the question of territorial sovereignty over the disputed area. The difficulty involved in defining the term *international environmental disputes* probably led to the demise of the ICJ's Chamber of the Court for Environmental Matters, since it could have created the problem of jurisdiction of the Chamber in that the parties might not agree that they were in dispute over an environmental matter.⁴ For the same reason, the prospect of the establishment of an international environmental court is also unlikely.

If one attempts to argue that environmental disputes are conflicts between States with regard to the breach of an international environmental treaty, this creates a never-ending dispute as to what constitutes an international environmental treaty. This is because sometimes ecological concerns are included within a particular treaty because they might be one of various issues which that treaty would like to address. UNCLOS is a good example in which environmental protection is one of the objectives that the drafters included in UNCLOS. Therefore, this thesis suggests that we should focus on the subject matter that international law would like to protect, such as oceans, international rivers, air, biodiversity, etc. If the essential point or one of the points of disagreement with regard to the interpretation and application of international obligations between the parties is concerned primarily with an environmental issue, it can be considered that an international environmental case has arisen.

Chapter 2 went on to identify the characteristics of international environmental disputes that are: (1) international environmental disputes may be

³ See chapter 2, section 2.1.

⁴ See chapter 2, section 2.1.

bilateral or multilateral in character, (2) international environmental disputes entails a multi-dimensional character, (3) international environmental disputes may entail difficulties in identifying the source of the breach of an international environmental obligation, (4) international environmental disputes may involve complex questions of quantifying damages and (5) international environmental disputes may involve the interpretation and application of procedural obligations.

Once an international environmental dispute has arisen, national decision-makers will have to choose the means for settling the dispute that they consider to be most appropriate. The decision on how a State would like to settle a dispute is rather subjective. That is to say, a government's choice depends on several factors, such as its relationships with the opposing States, internal factors, foreign policy, costs, government popularity and domestic interests. It is not the objective of this thesis to study what political factors governments may consider when they need the assistance of a neutral party to end an environmental dispute. Rather, this thesis pointed out that potential applicants or disputing parties need to consider the nature of disputes involving such characteristics of international environmental when selecting an appropriate mechanism.⁵

2) Are the dispute settlement mechanisms suitable for settling an international environmental dispute?

An endeavour has been made in chapter 4 to provide an objective analysis by considering the nature of environmental disputes and by contemplating the nature of each dispute settlement mechanism⁶ to find out how each mechanism may be suitable for settling environmental disputes and how they could be settled in an effective manner. So the thesis provides guidance for governments to enhance their understanding of the limits of each mechanism as well as the benefits that could be gained.

⁵ Lapidoth states in the context of water disputes that 'In choosing the appropriate mechanism, one should also bear in mind certain characteristics of water issues' Ruth Lapidoth, 'Some Reflections on Peaceful Means for the Settlement of Inter-State Disputes with Special Reference to the 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses' in Robin Sanchez, Jeff Woled and Darle Tilly (eds), *Proceedings of the First Biennial Rosenberg International Forum on Water Policy: Resolving Conflict in the Management of Water Resources* (University of California 1998) 71.

⁶ The nature of each mechanism has been discussed in chapter 3.

If a dispute arises in a bilateral context involving only two parties, all of the mechanisms are suitable for resolving this bilateral dispute. Basically, they offer adequate forums for this kind of dispute and practice shows that, in the majority of the cases submitted to them, nearly all of which involved bilateral disputes, all of the mechanisms worked well in a bilateral context.

For multilateral disputes involving several actors, one needs to consider those mechanisms that can facilitate the interests of a large number of parties. Non-judicial mechanisms may be the best option. The great advantage of mediation, conciliation and inquiry seems to be that the process is flexible, allowing for multiple participants. This depends on which techniques the mediators or conciliators may adopt. These means can accommodate disputes over the protection of the environment of common areas, disputes over the common heritage or the common concerns of mankind. For example, disputes about climate change, which have a collective character involving *erga omnes partes* can be best settled by non-judicial means. However, non-judicial means are a voluntary process that the State alleged to be in breach of an *erga omnes partes* obligation have to agree to mediate or conciliate except the case where a treaty has a provision allowing any State party to initiate the process of settlement unilaterally. If there is a breach of *erga omnes partes* obligations contained in particular MEAs in which the NCPs are established, States may consider bringing a dispute to the NCPs. This is because more than two parties to MEAs are entitled to trigger a dispute settlement process and they may be unilaterally referred without the consent of non-complying States. Therefore, States might need to consider whether they are a party to the relevant MEA in which an NCP is established. By this means multiple participants can be accommodated without showing that they are especially affected by non-compliance. For RFMO panels, they have procedures that are perfectly suited for multilateral environmental disputes. For example, there are provisions which allow any member of a commission to participate in the proceedings.

Judicial mechanisms, notably the ICJ, have experienced multiple applicants and multiple respondents, as is shown in several cases such as the *River Oder* case involving six States. This is suitable for environmental disputes in that all the parties share a common interest in a particular subject matter. However, in those cases where there is a breach of *erga omnes partes* environmental obligations, it is still unclear whether any treaty party can bring the case to the ICJ, since the Court has never

directly addressed this issue in an environmental context before. Although the Court touched upon the *erga omnes partes* obligation in the *Belgium v. Senegal* case, the central issue was not concerned with the environment. In the *Whaling* case the Court did not question Australia's standing, so that we can take this to imply that the ICJ may accept a claim alleging a breach of *erga omnes partes* environmental obligations. Moreover, given the fact that when deciding the two cases the Court was dealt with two treaties, it is uncertain about the scope of the right of States to bring a case in the absence of a multilateral treaty claiming that they are representing all other States parties.⁷ However, one obvious example that has been pronounced by the Sea Bed Disputes Chamber is that of the obligations relating to the preservation of the environment in the Area in which each party to UNCLOS is entitled to claim compensation. As for arbitration, an arbitral tribunal can hear a case with more than one applicant and/or defendant, e.g. the *Southern Bluefin Tuna* cases. The issue about international courts and *erga omnes partes* obligations applies equally to arbitration. In order to initiate arbitration, the parties have to find a treaty that provided for the unilateral initiation of arbitration or they have to conclude an agreement with the State alleged to be in breach and there is no guarantee that the State concerned will agree.

If States need to present a vast amount of scientific evidence concerning the environment in order to substantiate their claims, then recourse to non-judicial mechanisms may seem to provide a good structural arrangement to deal with such evidence. Mediation and conciliation may be conducted by a team of mediators and conciliators with different kinds of expertise. The parties may appoint experts that have relevant knowledge, such as hydrographers, ecologists and biologists, to be members of a team. In a case where all the members are lawyers, the parties may request, or non-judicial bodies may request, the assistance of external experts. Since the scientific information which judges encounter has become increasingly complex, it is, without doubt, beyond the capacity of judicial institutions to ascertain. However, there are rules of procedure that enable them to resort to experts. The problem here is that courts, notably the ICJ, has been reluctant to make use of such provisions and has relied heavily on the expert witnesses appointed by the parties by reading their opinions from the observations submitted to it or hearing their arguments in the cross-examination process in the courtroom, as shown in the *Whaling* case and the *Certain*

⁷ Christine Gray, 'Current Development: The 2014 Judicial Activity of the ICJ' (2015) 109 AJIL 583, 592.

Activities/Construction of a Road cases. The ICJ has never resorted to using experts *suo motu* in environmental cases. Outside the courtroom, the ICJ practice has revealed that *experts fantômes* are often resorted to. States bringing their case to the ICJ will certainly be faced with this practice in that their vast amounts of scientific evidence would be treated inappropriately. Thus, this kind of dispute is little suited for resolution by judicial decisions. If judicial mechanisms are the preferred means, then *ad hoc* arbitration is a better option, since the arbitrators could include, for example, relevant environmental scientists. Likewise, arbitral rules of procedure can be tailored to fit a case involving scientific questions, so that arbitration will have, to a greater extent, the potential to address the scientific issues more properly than the ICJ can. NPCs may employ various techniques to acquire and deal with scientific information with regard to non-compliance from different sources. Also, RFMOs panels can serve the purpose of disentangling the complexity of technical and scientific questions because of its composition not only lawyers are members but also scientists and technical experts

Environmental disputes which involve societal choice are suitable to be settled by non-judicial means. Mediation and conciliation are the processes whereby parties can ask decision-makers to consider non-legal factors. They may decide to have their dispute settled equitably on the basis of social and economic considerations that are suitable, especially for international water disputes pertaining to equitable and reasonable utilisation.⁸ Bringing non-legal factors into play is a way of matching those diplomatic dispute-settlement processes where a solution based on international law would not dispose satisfactorily of the dispute. On the contrary, judicial mechanisms, notably international courts, are not well suited to take into account those factors, since a case will be settled on the basis of international law. However, *ad hoc* arbitration might be an alternative for States seeking for binding outcomes, since they retain control over the rules of procedure so as to bring equity into play. It is also possible that the ICJ and the ITLOS may be asked to decide a case *ex aequo et bono* if the parties to a dispute agree explicitly. But in practice they have never decided a case based upon *ex aequo et bono*. NPCs and RFMOs panels have a broad

⁸ Natalia Ochoa-Ruiz, 'Dispute Settlement over Non-Navigational Uses of International Watercourses: Theory and Practice' in Laurence Boisson de Chazournes and Salman M.A. Salman (eds), *Water Resources and International Law / Les ressources en eau et le droit international* (Martinus Nijhoff Publishers 2005) 386.

discretion to take into account non-legal dimensions of a dispute rather than the law when providing its recommendations.

If a dispute is difficult to identify in terms of its sources, either because it involves multiple States, which makes it hard to identify the potential wrongdoer, or because it is extremely difficult to calculate the actual environmental harm, then inquiry may strive for success by making an impartial investigation of the facts by technical experts to establish causation. States may agree to ask an inquiry commission to carry out this task to resolve the dispute or as a prelude to the use of other mechanisms. It should be noted that an inquiry commission would not normally provide any recommendations. However, they could, as was shown in the Espoo inquiry commission and Baglihar dam case, also propose recommendations for settling disputes. Conciliation is also an appropriate means which is worth choosing. Due to the fact that conciliation also makes an active investigation into the facts in dispute, the parties may get benefits from this task if the sources of the breach are unclear. In addition, conciliators may employ diplomatic techniques, such as using persuasion or leverage, which are flexible enough to bring potential wrongdoers to engage in negotiating processes. Litigating in international courts is quite difficult, since they have to address the actual dispute rather than potential disputes. There must be a certainty of the parties to a dispute. A claim that an injury resulting from a breach of environmental obligations may be manifest in the future is rather speculative. Judicial means may not be appropriate means which allow States to litigate uncertain disputes. NCPs can investigate the facts relating to the sources of disputes so as to improve compliance with specific environmental treaty regimes. RFMO panels play any active role in finding the facts which they would use as a basis for deciding the case but they take the traditional approach of acquiring information by relying on the submissions of the parties. Once the facts giving rise to a dispute, the legal question of whether those facts represent a breach of international obligation by another State can be best answered by judicial means and NCPs.

For those cases involving the quantification of environmental damages, non-judicial mechanisms, by their very nature and their primary function, might not be a proper means to address the issue of damages. However, if the parties prefer to resort to non-judicial means, they can certainly perform this function, since the parties may agree to ask them to calculate compensation. The parties can select mediators or conciliators who have expertise in this field, coupled with the various diplomatic

techniques which could be employed to achieve this task. If the States litigate a case in the international courts, the latter have the power to perform this duty. However, the problem may be that judges may not have sufficient knowledge or information to calculate environmental damages and enough practical guideline to follow. One may suggest that the Court should adopt the UNCC's practice for the calculation because it provide a number of useful methodologies for calculating environmental damages but it is still uncertain whether they are willing to do so. *Ad hoc* arbitration might be a better option for those parties that have a preference for tailoring arbitral procedures, including establishing particular processes for quantifying damages. Lastly, NCPs and review panels are not designed to serve this purpose, since their function is to strengthen cooperation between the parties rather than determining compensation. For RFMO panels, it is not a panel's function to award compensation for environmental damages.

In cases where the interpretation and application of procedural obligations, such as the obligations to notify, inform, consult and cooperate, are required, judicial means are likely to be suitable for settling this kind of dispute, judging from the past experiences of the ICJ and the ITLOS, as well as arbitral tribunals. This is because, firstly, the interpretation and application of procedural obligations are totally about legal issues relating to what judges or arbitrators are required to do. Secondly, they are familiar with this kind of obligation, as experienced in the *MOX plant* case, the *Pulp Mills* case and the *Certain Activities/Construction of a Road* cases. Thus, judges would be able to apply and interpret these obligations consistently and predictably. Non-judicial mechanisms, notably mediation and conciliation, could be used to interpret and apply such obligations when making recommendations because they may be composed of lawyers and diplomats and they can also take the relevant law into account when making recommendations. Conciliation might be the most suitable non-judicial means, since it can deal with the legal issue and, in those cases where the parties cannot promptly comply with their procedural obligations, conciliators can provide an equitable compromise that is acceptable to all parties. For example, they may suggest that a State should conduct an EIA and notify them if there is risk of environmental harm. NCPs are suitable only in some MEAs, such as the Aarhus and Espoo Convention, which are concerned directly with procedural obligations. But, generally, NCPs deal more with substantive obligations. Also, a RFMO panel decides those cases which involve the compatibility of conservation measures with the RFMO

convention, UNCLOS, the Fish Stocks Agreement whose findings are unlikely to order the parties to comply with procedural obligations.

3) Are the dispute settlement mechanisms effective in settling international environmental disputes according to the criteria used for evaluating effectiveness?

To answer this question, chapter 5 established the criteria of effectiveness with a view to using them as a framework to assess each of the mechanisms which are 1) the resolution of a dispute and its effect on States' behaviour and 2) the availability of mechanisms to induce compliance. In this chapter, the discussion of effectiveness focused purely on the terms of outcomes. Given that there have only been a small number of cases, it is difficult to make generalisations about the first criteria with regard to dispute solving and behaviour changing.

With regard to mediation and inquiry, all the disputes brought before them were settled and the parties complied with the recommendations of the mediators and the inquiry committees. In the Indus Waters dispute, the mediator, through skillful mediation, helped to establish a new régime that is applicable to the utilisation of the Indus, which can be considered as a success on the part of the World Bank. In the case of the inquiries, in the Baglihar Hydroelectric Dam and the Danube-Black Sea Navigation Route Project cases the parties accepted the findings and recommendations and agreed to comply with them. The situation with regard to behaviour changes is rather different. In all the cases except for the Indus Waters dispute, the parties still need to further modify their behaviour. In the Baglihar Hydroelectric Dam case, another dispute arose regarding the application and interpretation of the Indus Waters Treaty. In the Danube-Black Sea Navigation Route Project case, full compliance with the obligations of the Espoo Convention needs to be further improved. Thus, the recommendations of the inquiry committees have had only a limited impact on the behaviour of the parties.

As far as judicial mechanisms are concerned, the experiences of the ICJ indicated that in the *1974 Nuclear Tests* case, the *Pulp Mills* case and the *Whaling* case the ICJ were settled and the parties agreed to comply with the judgments. However, the Court has failed to influence the parties' behaviour in terms of complying with the wider spirit of the judgments. In the *Pulp Mills* case, a new

dispute seems to have arisen after the judgment was rendered. As for the *Whaling* case, it has not abandoned scientific whaling in the Antarctic and has made a reservation on the dispute concerning scientific research in order to preclude the jurisdiction of the ICJ. Therefore, like non-judicial means, the ICJ could stop the disputes temporarily but it could not change State's behaviour in the light of the wider spirit of its judgments. However, in the *Gabčíkovo-Nagymaros* case, the ICJ could not even settle the dispute.

As for the cases of arbitration, four cases, namely the *Bering Sea Fur-Seals Arbitration*, the *Trail Smelter Arbitration*, the *Iron Rhine Arbitration* and the *Indus Waters Kishenganga Arbitration*, were settled and the parties complied with the awards. In the first two cases, arbitrations were effective because the awards have had a significant impact on the behaviour of the parties, since they helped to establish the régimes for future conduct. In the last two cases, the awards have had only a limited impact on the behaviour of the parties. For the *Iron Rhine Arbitration*, the line has not been reopened and the project is on hold. For the *Indus Waters Kishenganga Arbitration*, Pakistan keeps on claiming that several new hydropower dams that are being built by India are violating the Indus Waters Treaty.

As for the ITLOS, the cases discussed in this chapter are provisional measures orders. In all the cases, the disputes were resolved and the parties complied with the provisional measures. In the *Land Reclamation* case, the provisional measures had an impact on the ways in which the parties carried out further negotiations. The provisional measures helped to improve the cooperation between the parties in the *MOX Plant* case. In the *Southern Bluefin Tuna* cases, the parties were able to create a positive and constructive atmosphere as a result of the provisional measures.

As far as NCPs are concerned, from the experience reviewed, the parties are proving to be receptive to the findings, since they usually show their willingness to comply with the recommendations. However, the non-complying States in all the cases have not achieved full compliance. They are being monitored by the NCPs for their implementation on a regular basis until they have fulfilled their obligations. NCP process initiated by party-to-party trigger is unpopular, since it can be considered as an unfriendly act. States will choose to do this only if their major interests are at stake.

In the case of the RFMOs panels, the only case under the SPRFMO convention that was brought before the Review Panel was settled and both the parties followed the recommendations.

With regard to the availability of mechanisms to induce compliance as an effectiveness indicator, non-judicial means have no mechanisms to induce compliance and they do not need to have them. As for the ICJ's judgments, the SC can play this role but, in practice, it has never adopted any measures. In cases of arbitration and ITLOS's judgments, the parties can bring the dispute as a new case against the losing party to the ICJ and it can adopt counter-measures, since failure to comply with an award or a judgment is a breach of an international obligation. There are several measures that are available under some NCPs to induce repeated non-complying parties to comply, such as the suspension of benefits under the MEA concerned and trade restrictions. For *ad hoc* panels, there are dispute settlement mechanisms under UNCLOS and the Fish Stocks Agreement if an objecting State does not accept the panel's recommendations. In addition, RFMOs can deal with the issue of non-compliance by adopting measures, such as suspending their right to vote.

4) How can the shortcomings that have been exposed in dispute settlement mechanisms be overcome?

Chapter 6 answered this research question. With regard to the difficulty in selecting mediators, conciliators or inquiry commissions with expertise in relation to environmental issues, this thesis proposed that a roster of experts who are readily available for the disputing States needs to be established using the practice of the Work Bank as guidelines for other international organisations, such as the IUCN.

With regard to the lack of mechanisms to enforce arbitral awards or the ITLOS judgments, the proposal is that the existing mechanisms make a contribution to the implementation process. For example, if a dispute is concerned with MEAs, then COPs or MOPs may perform the task of inducing compliance. If the dispute is not about a convention under which COPs/MOPs have been established, such as the OSPAR Convention, or UNCLOS and the watercourses conventions, the institutions that were established under these conventions could perform this task.

Regarding the ways of handling scientific and technical evidence, this thesis proposed three ways to address this problem. Firstly, if a fact-finding body had

investigated the facts of a dispute prior to the referral of that dispute to a court, the latter could draw on the report of the body concerned when deciding the case. Secondly, *in situ* inspections may help the Court to acquire a better understanding of scientific and technical evidence. Lastly, court-appointed experts need to be appointed for the sake of rendering a more informed judgment.

As far as the issue of how multilateral disputes can be litigated is concerned, this thesis proposed that the provisions relating to intervention could help to address this problem by broadening the participation of States. The ICJ needs to take a less restrictive application of Article 62 of the ICJ Statute and move towards a more liberal approach to intervention by interpreting ‘an interest of a legal nature’ to include community interests of a legal nature and should use Article 42 (b) (ii) and Article 48 of the ILC’s Articles on States Responsibility as possible guidelines. In addition, Article 63 can also be used as a tool to overcome this problem because it does allow the other parties to particular MEAs to present their views on a matter of general or common interest.

Regarding the issue of how the parties can implement an ambiguous judgment, this thesis proposed that a third-party non-judicial mechanism could be resorted to so that the overall dispute can be further settled.

With regard to the problem of the unclear relationship between NCPs and traditional judicial means of dispute settlement, the proposal is that ‘without prejudice’ clauses should be interpreted in a collaborative manner. There are three ways of engaging in such an interpretation. Firstly, a court could treat the findings of a non-compliance body as ‘subsequent practice’. Secondly, a court could treat the findings as ‘relevant rules of international law applicable in the relation between the parties’. Thirdly, a court could use the findings as a source of reliable factual evidence for deciding a case.

Regarding the extremely rapid proceedings of RFMOs panels, the proposal is that the existing time limits may need to be extended in order to evaluate the complex set of factual evidence thoroughly.

2. FURTHER OBSERVATIONS ON THE SELECTION OF MECHANISMS

There are other considerations that will guide national decision-makers to choose the means for settling the dispute that they consider to be most appropriate—1) the desired outcome 2) time and 3) cost.

2.1 Desired Outcomes

Clearly, a government may choose to engage in the dispute settlement process that could provide something tangible for it to gain. A government would have its own desired outcomes, with the primary objective being the termination of a dispute aimed at a peaceful coexistence among the parties to the dispute. In settling international environmental disputes, States may have various desired outcomes which they want to achieve with the assistance of a third party. In order to reach such outcomes, a government has to choose the right mechanism. It should be pointed out that the proposals in 2.1.1 and 2.1.2 would be possible if the parties desire the same outcome and the proposal in 2.1.3 is go beyond the dispute settlement between the parties.

2.1.1 Seeking to Enhance Future Cooperation in Protecting the Environment

It is obvious that litigating a dispute by a judicial process means that the outcomes will be a zero-sum solution or a winner-takes-all type of solution in which a gain from one party involves a loss for the other party. In judicial proceedings each party needs to present to the decision-makers the worst aspect of the other party, encouraging confrontation rather than the exploring of ‘a more imaginative settlement’.⁹ The situation may be that one party wins the case while the other one loses. The dispute may be settled but the resentment of the losing party is not good for long-term relationships.¹⁰ One might argue that international courts could adjudge that the losing party should cooperate with the winning party so as to enable them to strengthen their cooperation in protecting the environment. It is not wrong to put forward such argument, since international courts usually do order the parties to cooperate with regard to environmental matters. Compulsory cooperation based on a judicial order resulting from adversarial proceedings will probably not maintain a long-continuing

⁹ Vaughan Lowe, ‘Some Comments on Procedural Weaknesses in International Law’ (2004) 98 ASIL Proceedings 37, 37.

¹⁰ Birnie views that the use of hard techniques can exacerbate disputes and that softer techniques may be much more appropriate see Patricia Birnie, ‘Legal Techniques of Settling Disputes: The “Soft Settlement” Approach’ in William E. Butler (ed), *Perestroika and International Law* (Martinus Nijhoff Publishers 1990) 191.

relationship, especially in the matter of environmental protection, which requires States to continually comply with their obligations to conduct an EIA where there is any risk of significant harm, to exchange information and engage in consultation. Judicial means are unlikely to be suitable for enhancing cooperation. Bilder notes that ‘the parties to long term relationships may be particularly reluctant to “take their partner to court” as a way of settling disputes.’¹¹

It would be more advantageous for disputing parties to settle their disputes by resorting to non-judicial mechanisms if a government desires to enhance future cooperation in protecting the environment rather than asking judges questions about the legality or illegality of certain actions. While judicial mechanisms are aimed at finding the rights and obligations of the parties to a dispute, based on rule-oriented procedures, non-judicial mechanisms avoid a win-lose situation and search for win-win solutions, i.e. consensual solutions to a dispute and confidence building.¹² This may be understood as a joint problem-solving approach rather than leaving a dispute to judicial mechanisms in which the parties lose control over the procedures and the outcomes.¹³ It would be desirable for the parties to cooperate on the basis of voluntary compliance with their international environmental obligations for the improvement of environmental quality or the preservation of natural resources. Mediation, conciliation and inquiry may be promoted by international organisations that are relevant to the protection of the environment. The atmosphere of the process is non-adversarial and the disputants have a chance to discuss the potential solutions with a view to come to a mutual agreement aided by a third party. As was mentioned in chapter 4, UNEP can provide such mediation services as it is equipped with expertise in the environmental field. Pechota is of the opinion that ‘active involvement by an international body in a dispute tends to promote long-term goals and to foster settlement with a view to the future rather than to the present.’¹⁴ It is worthwhile to consider inviting UNEP to act as mediator to resolve a dispute with a view to enhancing future cooperation and to

¹¹ Richard B. Bilder, ‘An Overview of International Dispute Settlement’ (1986-1987) 3 *Emory JInt’l DispRes* 1, 14.

¹² Magdy Abdel Moneim Hefny, ‘International Water Issues and Conflict Resolution: Some Reflections’ (1995) 7 *RADIC* 360, 367.

¹³ Judge Al-Khasawneh is of the opinion in the context of water disputes that ‘imposition of a solution by a judicial or arbitral body may be short term, as it often departs from the result intended by the parties...’, see Awn S. Al-Khasawneh, ‘Do Judicial Decisions Settle Water-Related Disputes?’ in Laurence Boisson de Chazournes, Christina Leb and Mara Tignino (eds), *International Law and Freshwater: The Multiple Challenges* (Edward Elgar Publishing 2013) 359.

¹⁴ Vratislav Pechota, *Complementary Structures of Third-Party Settlement of International Disputes* (UNITAR 1971) 43.

seek for consensus building in managing disputes. In those cases where parties could not reach mutual agreement to cooperate, bringing a dispute to the international courts should be a last resort.

2.1.2 Setting Up a Régime or Standard for Environmental Protection

It is possible that the desired outcome for the parties would be the establishment of a régime or standard for the protection of the environment. Litigating in international courts would not be the right choice, since they normally deal with breaches of international environmental obligations rather than creating an innovative system or producing constructive proposals for the parties. *Ad hoc* arbitration, mediation and conciliation are the mechanisms that can perform these duties, since their tasks are determined by the disputants. For arbitration, the parties may agree that the arbitrators shall determine a régime for regulating the future operation of certain activities with a view to protecting the environment. For instance, in the *Bering Sea Fur-Seals Arbitration*, the parties asked the arbitrators to determine the necessary regulations for the proper protection and preservation of the fur seal.¹⁵ To respond as the parties requested, the Tribunal, in its Award, set out a standard for preserving the fur seals, such as catch limits and types of equipment for fur seal hunting. In the *Trail Smelter Arbitration*, Canada and the US requested the Tribunal to answer the question ‘what measures or régime, if any, should be adopted or maintained by the Trail Smelter’.¹⁶ Generally, the awards of an arbitral tribunal are binding so that the parties must implement any regime that is established. The Tribunal in the *Trail Smelter Arbitration* imposed a permanent régime, explained in very great detail, with a view to controlling the maximum emissions of sulphur dioxide that could be released from the stacks. These are examples which show that arbitration, quite apart from the interpretation and application of international law to a case, can play a constructive role in setting up a regime or standards. It has also an advantage in those cases where science and technology come into play, since arbitrators may not necessarily be lawyers. In addition, the parties could agree to appoint relevant experts to help the arbitrators in setting up a regime or standard which needs to be scientifically established.

¹⁵ Art. VII of the 1892 Treaty between the United States of America and Great Britain, *Bering Sea Fur Seals Arbitration*, 801.

¹⁶ *Trail Smelter Arbitration*, 1908.

If parties would like to develop a régime or standard through non-judicial mechanisms in which they can have, unlike arbitration, a high degree of participation in the process of establishing the régime that they want, then the mediators or conciliators could help the parties to achieve their desired outcome by proposing recommendations. The process used to achieve the desired outcome may not be straightforward, like the rendering of arbitral awards, so that the arbitrators need to use diplomatic techniques in an attempt to find a mutually agreeable solution. There is a well-known example where the World Bank assisted India and Pakistan in reaching mutual agreement, culminating in the conclusion of the Indus Waters Treaty, which can be considered as being the outcome of the process of dispute settlement. The settlement of the Indus waters dispute took 8 years from the time that the World Bank began to mediate the dispute. Throughout these 8 years, a series of dialogues took place. There were the Bank's proposals, as well as the parties' own proposals and plans that had been negotiated and discussed. The mediation in this case was a continuous process in which the ultimate outcome was produced in the form of a treaty as a result of negotiations between all the parties, as well as the mediator, rather than being produced in the form of a judgment made by judges. Such a long process could happen if the dispute in question is complex, either because of the crux of the matter or because of the relationships between the disputants. Therefore, disputing parties need to consider whether an environmental dispute needs to be resolved promptly or whether they could endure environmental harm while coming to a settlement.

2.1.3 Raising Awareness of International Environmental Problems

This desired outcome is really exceptional, since a government may not sue other States in contentious proceedings with a view to raising awareness of international environmental problems.¹⁷ Usually, States sue other States for the sake of their own national interests or national security. Most, if not all, of the environmental cases, such as the *Gabčíkovo-Nagymaros* or *Pulp Mills* cases, are obvious examples of where environmental problems are raised purely for the sake of their own self-interest. Thus, raising awareness of environmental problems through judicial means

¹⁷ Some writer proposed that advisory proceedings might well be used to achieve this objective see Laurence Boisson de Chazournes, 'Advisory Opinion and the Furtherance of the Common Interest of Humankind' in Cesare Romano, Laurence Boisson de Chazournes and Ruth MacKenzie (eds), *International Organizations and International Dispute Settlement: Trends and Prospects* (Transnational Publishers 2002).

runs counter to the normal practice of States when they decide to litigate in international courts.

However, it is not impossible, if States so desire, to pursue this objective in the international courts, such as in the ICJ, if they are given jurisdiction to hear a case. As is shown in the *Whaling* case, Australia was not ostensibly injured by the JARPAR II whaling programme but it still decided to bring the case to the ICJ. One may argue that the reason why Australia brought this dispute before the ICJ was the commitment that the Rudd Labour government had made before the general election to put an end to this programme in the Southern Ocean.¹⁸ Thus, the primary motive was, arguably, a matter of internal political affairs rather than any intention to raise awareness among the international community. Even though Australia may have brought the case to the ICJ without any intention to raise awareness,¹⁹ its impact as a by-product of the dispute settlement cannot be underestimated. Due to the fact that judicial proceedings are conducted in public, unlike mediation or conciliation, the issues can get media attention, thus paving the way to reaching the forefront of the international community's attention, in addition to achieving the objective of resolving the dispute so as to create legal order of international society.²⁰

Moreover, judicial decisions are authoritative interpretations of a treaty and they could have an influence on state conduct despite the fact that the judgment is binding only upon the parties to a case, since 'the reasoning leading to the dispositive and the dicta add to the body of international precedent'.²¹ Litigating environmental cases with regard to common resources or common concerns of mankind in the ICJ, whatever the result of a case may be, could carry some implications for various stakeholders other than the parties to the case, although such stakeholders are not

¹⁸ Tim Stephens, 'International Environmental Disputes: To Sue or Not to Sue?' in Natalie Klein (ed), *Litigating International Law Disputes: Weighing the Options* (CUP 2014) 287. See also Philip Doring, 'Whaling Plan Was to Divert Public' *The Sydney Morning Herald* (Sydney, 5 January 2011).

¹⁹ In the oral proceedings, Henry Burmester, an Australian Government Solicitor, said that 'Australia is seeking to uphold its collective interest, an interest it shares with all other parties' CR 2013/18, para.

19. Geddis and Ridings consider that 'there was strong political support for the cause in dispute and active public interest in the outcome' in New Zealand's intervention see Elana Geddis and Penelope Ridings, 'Whaling in the Antarctic: Some Reflections by Counsel' (2013) 11 *New Zealand Ybk Intl L* 143, 143.

²⁰ Ian Brownlie, 'Why Do States Take Disputes to the International Court?' in Nisuke Ando and others (eds), *Liber Amicorum Judge Shigeru Oda* vol 2 (Kluwer Law International 2002) 831; Francisco Orrego Vicuña, 'A New System of International Dispute Settlement for the Twenty-First Century' in Calixto A. Armas Barea and others (eds), *Liber Amicorum "In Memoriam" of Judge José María Ruda* (Kluwer Law International 2000) 239-240.

²¹ Cesare Romano, 'Litigating International Law Disputes: Where to?' in Natalie Klein (ed), *Litigating International Law Disputes: Weighing the Options* (CUP 2014) 470.

allowed to participate in the proceedings since they are constrained by the ICJ's procedure in a contentious case.²² For the *Whaling* case, the stakeholders involved in whaling, such as the whaling industry, anti-whaling NGOs, the IWC etc., might change their policies with regard to the conservation of whales as a result of the ICJ's judgment. Shirley Scott is of the opinion that the initiation of proceedings by Australia in the *Whaling* case can be understood as 'something of a stooge for the anti-whaling movement, because the case could have been anticipated to achieve publicity for the issue, no matter what the legal outcome'.²³

2.2 Time

Time is a crucial factor which States need to take into account when choosing their dispute settlement mechanism. Some environmental disputes need to be settled as early as possible because of the irreversibility of the ecological harm being caused. In addition, some environmental disputes, for instance a dispute over the utilisation of international rivers, if prolonged, might affect the economic development of the disputing parties. If States are in a great hurry to settle their dispute, non-judicial means, such as mediation or conciliation, might be a good option because they are generally quicker than judicial means. It should be noted, however, that mediation or conciliation might take a long or a short time. Given the fact that mediators or conciliators may come up with several proposals until they prove acceptable to all parties, this may prolong the process of dispute settlement, as in the Indus Water case, which took around 8 years and in which the mediators did not get the spontaneous acceptance of the parties. Whether it requires a long or short timeframe, it depends on the preparedness of the parties to make concessions and to accept recommendations proposed by a third party with a view to reaching a common solution.

If States seek for a rapid decision from a judicial mechanism, arbitration is the better option, since it is faster than the international courts. With *ad hoc* arbitration, the parties can specify the times, in the *compromis*, when arbitral awards should be delivered. While disputants will engage in lengthy legal battles in the ICJ that may, due to its large caseloads, take four or more years, except the parties seek provisional

²² Andrew Strauss, 'Climate Change Litigation: Opening the Door to the International Court of Justice' in William C.G. Burns and Hari M. Osofsky (eds), *Adjudicating Climate Change: State, National, and International Approaches* (CUP 2009) 337-338.

²³ Shirley V. Scott, 'Australia's Decision to Initiate Whaling in the Antarctic: Winning the Case Versus Resolving the Dispute' (2014) 68 *Australian JInt'l Aff* 1, 13.

measures (around one month in deciding the request) in order to prevent irreversible ecological harm from continuing during the proceedings, arbitration takes on average around two years to finish the task. NCPs probably take a much shorter period of time to consider a dispute than the aforesaid mechanisms. The quickest procedures can be seen from RFMO panels but the caveat must be made that speedy procedures would not guarantee the quality of decisions.

2.3 Cost

If the parties are concerned about the costs of dispute resolution, non-judicial means are the best option, since they are less costly than judicial means. Bringing a case to international courts and arbitration differs in terms of the amount of money the parties have to pay. Arbitration will tend to be more expensive because the parties have to pay for the arbitrators. Also, they have to hire premises for arbitrating which may lead to a victory gained at too great a cost. However, there is a Financial Assistance Fund (FAF) that was established in 1994 that provides financial assistance for a State that is a party to the Conventions of 1899 or 1907 for settlement under the auspices of the PCA, and where the State, at the time of requesting assistance, is listed on the DAC List of Aid Recipients.²⁴ It should be noted that arbitration would cost a lot of money and it is still unclear how large are the grants which will be provided. The Fund might not significantly remove the cost of arbitration. This is because not many States have contributed to this fund.²⁵ The cost of litigation in international courts is different from that of arbitration. With the former, parties do not have to pay for international judges or the hire of premises. For the ICJ and ITLOS, ICJ judges are paid for out of the UN budget and ITLOS by the States parties to UNCLOS collectively. The necessary expenses that are involved are the fees of international lawyers of repute to present a party's case who are highly paid. Parties might need to pay for environmental studies carried out by experts, such as geomorphologists, fresh water and marine ecologists and biologists etc., in order to substantiate their claims or to settle international environmental disputes. As well as the FAF, a similar fund is also

²⁴ Two Asian States, a Central American State, a South American State, and three African States have received grants from the FAF. See PCA, *Annual Report 2014* (PCA 2014) 37.

²⁵ Since 1994, Cyprus, Costa Rica, France, Lebanon, the Netherlands, Norway, Saudi Arabia, South Africa, Switzerland and the United Kingdom have contributed to the Fund. Ibid, 37.

available for poorer States to litigate in the ICJ and ITLOS but it is impossible for it to cover the full costs.²⁶

3. EPILOGUE

All of the dispute settlement mechanisms can be used in a collaborative manner. The fact that the parties decide to litigate in international courts does not mean that the other mechanisms would be excluded. Before or during the course of the judicial proceedings, diplomatic means can always be resorted to. As it was put in the premise in this thesis, international courts have some drawbacks which are that they are limited in their capacity to resolve environmental problems. Non-adjudicative means could be used to supplement adjudicative dispute settlement mechanisms. For example, inquiry may be resorted to, as a prelude to judicial mechanisms, for the examining of environmental damages or risks of transboundary harm. Judges may take the findings of an inquiry commission into account when weighing legal claims in order to adjudge the legality or illegality of certain actions carried out by the defendants. Higgins notes that ‘fact-finding commissions are likely to be more effective than a judicial body.’²⁷ Also, a NCP’s findings may be used by judicial bodies as a source of reliable factual evidence. Thus, model provisions that could be included in international agreements relating to non-judicial and judicial mechanisms, such as the work related to biodiversity beyond national jurisdictions, may be as follows:

Article...

Dispute Settlement

1. In the event of a dispute between States Parties concerning the interpretation or application of this Convention, the parties concerned shall seek solution by negotiation with good faith.

2. If the parties concerned cannot reach agreement by negotiation, they may jointly request mediation or inquiry, by a third party.

²⁶ See Revised Terms of Reference in UNGA ‘Secretary-General’s Trust Fund to Assist States in the Settlement of Disputes through the ICJ: Report of the Secretary-General’ (21 September 2004) UN Doc A/59/372. See the Fund for the ITLOS in UNGA Res 55/7 ‘Ocean and the Law of the Sea’ (27 February 2001) UN Doc A/RES/55/7.

²⁷ Rosalyn Higgins, ‘The Desirability of Third-Party Adjudication: Conventional Wisdom or Continuing Truth?’ in J.E.S. Fawcett and Rosalyn Higgins (eds), *International Organization: Law in Movement: Essays in Honour of John McMahon* (OUP 1974) 45.

3. *When ratifying, accepting, approving or acceding to this Convention, or at any time thereafter, a State may declare in writing that for a dispute not resolved in accordance with paragraph 1 or paragraph 2 above, it accepts one or more of the following means of dispute settlement:*

(a) *Conciliation in accordance with the procedure laid down in the Optional Rules for Conciliation of Disputes Relating to Natural Resources and/or the Environment;*

(b) *Submission of the dispute to Non-Compliance Procedure established under this Convention.*

4. *If the parties to the dispute have not, in accordance with paragraph 3 above, accepted the same or any procedure, the dispute shall be submitted only to Non-Compliance Procedure established under this Convention, unless the parties to the dispute agree otherwise*

5. *If the parties concerned cannot settle their dispute by the means mentioned in paragraph 3 or paragraph 4, the dispute shall be submitted to arbitration in accordance with the Permanent Court of Arbitration Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment. Such arbitral tribunal may take into account the findings of conciliation or Non-Compliance Procedures when it has to decide the dispute.*

This thesis has demonstrated that there is a limited usefulness of having resort to the ICJ with regard to its jurisdiction to decide environmental disputes. Even when States accepted the compulsory jurisdiction of the ICJ under Article 36 (2) of the Statute of the ICJ, they sometimes exclude certain types of disputes from the jurisdiction of the ICJ, by way of reservation. The aftermath of the *Whaling* case is the obvious example, where Japan made a reservation to exclude the jurisdiction of the ICJ in future cases involving research on, or conservation, management or exploitation of, living resources of the sea. Although there is an increased effort to resolve environmental disputes before the ICJ, one has to urge caution against exaggerating the ICJ's role in settling disputes, especially with regard to the environmental protection and sustainable utilisation of natural resources.²⁸ The withdrawal of the *Aerial Spraying* case reflects the fact that the final decision of the ICJ would not be the preferred choice of the parties. They may not resort to

²⁸ Hersch Lauterpacht, *The Development of International Law by the International Court* (CUP 1982) 4.

international courts if they are not satisfied that clarification of legal issues will help the settlement of the dispute.²⁹ As Rosenne writes: ‘the cases withdrawn by the parties before decision partly reflect this feature, to be added to the credit side of the Court’s ledger’.³⁰ Successful environmental dispute resolution depends partly on the readiness of the parties to end a dispute and partly on the structure of the dispute settlement mechanism. Among the whole gamut of dispute settlement mechanisms, international courts may not always provide an appropriate forum to settle an environmental dispute. Judge Schwebel noted that ‘The Court (the ICJ) is no longer seen solely as “the last resort” in the resolution of disputes. States rather may have recourse to the Court in parallel with other methods of dispute resolution’.³¹ Ultimately, governments would have to decide what mechanisms could accommodate the unique characteristics of international environmental disputes that are at issue, taking into account all of the considerations discussed in this thesis.

²⁹ Shabtai Rosenne, *The Law and Practice of the International Court 1920-2005: Volume I The Court and the United Nations* (4 edn, Martinus Nijhoff Publishers 2006) 167.

³⁰ Ibid.

³¹ Judge Stephen M. Schwebel, ‘Speech to the General Assembly of the United Nations’ (27 October 1998) 2, available at <<http://www.icj-cij.org/presscom/files/7/3007.pdf>> accessed 14 June 2016.

BIBLIOGRAPHY

BOOKS AND ARTICLES

Abi-Saab G, *Les Exceptions préliminaires dans la procédure de la Cour internationale, étude des notions fondamentales de procédure et des moyens de leur mise en oeuvre* (A. Pedone 1967)

Agrawal SC, 'Legal Aspects of the Indo-Pakistan Water Dispute' (1958) 21 SCJ 157

Ahtisaari M and Rintakoski K, 'Mediation' in Cooper AF, Heine J and Thakur R (eds), *The Oxford Handbook of Modern Diplomacy* (OUP 2013)

Aitchison CU, *A Collection of Treaties, Engagements and Sanads Relating to India and Neighbouring Countries*, vol 13 (Superintendent Government Printing 1933)

Anderson D, 'Scientific Evidence in Cases Under Part XV of the LOSC' in Nordquist MH and others (eds), *Law, Science and Ocean Management* (Martinus Nijhoff Publishers 2007)

Andresen S, 'The Role of Scientific Expertise in Multilateral Environmental Agreements: Influence and Effectiveness' in Ambrus M and others (eds), *The Role of 'Experts' in International and European Decision-Making Processes: Advisors, Decision Makers or Irrelevant Actors?* (CUP 2014)

Al-Khasawneh AS, 'Do Judicial Decisions Settle Water-Related Disputes?' in Boisson de Chazournes L, Leb C and Tignino M (eds), *International Law and Freshwater: The Multiple Challenges* (Edward Elgar Publishing 2013)

Assetto VJ and Bruyninckx H, 'Environment, Security and Social Conflict: Implications of the Gabčíkovo-Nagymaros Controversy' in Blake G and others (eds), *International Boundaries and*

Environmental Security: Frameworks for Regional Cooperation (Kluwer Law International 1997)

Aurescu B, 'The Ukrainian "Bystroe Canal" Project in the Danube Delta: Between Political Interest and International Environmental Law' (2006) 59 RHDI 553

Bar-Yaacov N, *The Handling of International Disputes by Means of Inquiry* (OUP 1974)

Barnárdez ST, 'Bilateral, Plural and Multipartite Element in International Judicial Settlement' in Ando N and others (eds), *Liber amicorum judge Shigeru Oda* (Kluwer International Law 2002)

Baxter R, 'The Indus Basin' in Baxter R, Teclaff LA and Teclaff E (eds), *The Law of International Drainage Basins* (Oceana Publications 1967)

Benvenisti E, 'Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law' (1996) 90 AJIL 384

Benzing M, 'Community Interests in the Procedure of International Courts and Tribunals' (2006) 5 LPICT 369

Berber FJ, 'The Indus Water Dispute' (1957) 6 Indian Ybk IntAff 46

Bercovitch J, 'International Mediation and Dispute Settlement: Evaluating the Conditions for Successful Mediation' (1991) 7 NJ 17

—, *Theory and Practice of International Mediation: Selected Essays* (Routledge 2011)

Bercovitch J and Kadayifci A, 'Exploring the Relevance and Contribution of Mediation to Peace-Building' (2002) 9 PCS 21

Beyerlin U, Stoll P-T and Wolfrum R, 'Conclusions Drawn from the Conference on Ensuring

Compliance with MEAs' in Beyerlin U, Stoll P-T and Wolfrum R (eds), *Ensuring Compliance with Multilateral Environmental Agreement: Academic Analysis and Views from Practice* (Martinus Nijhoff Publishers 2006)

Bhagwati PN, 'Environmental Disputes' in Sand PH (ed), *The Effectiveness of International Environmental Agreements: A Survey of Existing Legal Instruments* (Cambridge Grotius Publications Limited 1992)

Biermann F, '"Common Concern of Humankind": The Emergence of a New Concept of International Environmental Law' (1996) 34 Archiv des Völkerrechts 426

—, 'Common Concerns of Humankind and National Sovereignty' in Law CCoI (ed), *Globalism: People, Profits and Progress: Proceedings of the 30th Annual Conference of the Canadian Council on International Law* (Kluwer Law International 2002)

Bilder R, 'The Settlement of Disputes in the Field of the International Law of the Environment' (1975) 144 Recueil des Cours 139

Bilder RB, 'An Overview of International Dispute Settlement' (1986-1987) 3 Emory JInt'l DispRes 1

Birnie P, 'Legal Techniques of Settling Disputes: The "Soft Settlement" Approach' in Butler WE (ed), *Perestroika and International Law* (Martinus Nijhoff Publishers 1990)

Birnie P, Boyle A and Redgwell C, *International Law and the Environment* (3 edn, OUP 2009)

Biswas AK, 'Indus Water Treaty: The Negotiating Process' (1992) 17 WI 201

Bodansky D, *The Art and Craft of International Environmental Law* (HUP 2010)

Boisson de Chazournes L, 'Advisory Opinion and the Furtherance of the Common Interest of

Humankind' in Romano C, Boisson de Chazournes L and MacKenzie R (eds), *International Organizations and International Dispute Settlement: Trends and Prospects* (Transnational Publishers 2002)

—, 'Dispute Settlement Procedures and Fresh Water: Multiplicity and Diversity at Stake' in Boschiero N and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013)

Boisson de Chazournes L and Angelini A, 'After "The Court Rose": The Rise of Diplomatic Means to Implement the Pronouncements of the International Court of Justice' (2012) 11 LPICT 1

Boisson de Chazournes L and Campanelli D, 'Neighbour States' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006)

Borràs Pentinat S, 'Comparative Analysis of Selected Compliance Procedures under Multilateral Environmental Agreements' in Maljean-Dubois S and Rajamani L (eds), *La Mise en Oeuvre du Droit International de l'Environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011)

Bouwhois S, 'Country/Region Report: Australia' (2001) 12 YIEL 574

Bowett DW, 'Contemporary Developments in Legal Techniques in the Settlement of Disputes' (1983) 180 *Recueil des Cours* 169

—, 'The Conduct of International Litigation' in Bowett DW (ed), *The International Court of Justice: Process, Practice and Procedure* (BIICL 1997)

Boyle A, '“Saving the World?” Implementation and Enforcement of International Environmental Law Through International Institutions' (1991) 3 JEL 229

—, ‘Settlement of Disputes Relating to the Law of the Sea and the Environment’ in Koufa K (ed), *International Justice - XXVI Thesaurus Acroasium* (Thessalonika : Sakkoulas Publications 1997)

—, ‘The Gabčíkovo-Nagymaros Case: New Law in Old Bottles’ (1997) 8 YIEL 13

—, ‘Remedying Harm to International Common Spaces and Resources: Compensation and other Approaches’ in Wetterstein P (ed), *Harm to the Environment: The Right to Compensation and the Assessment of Damages* (OUP 1997)

—, ‘Reparation for Environmental Damage in International Law: Some Preliminary Problems’ in Bowman M and Boyle A (eds), *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (OUP 2002)

—, ‘Transboundary Air Pollution: A Tale of Two Paradigms’ in Jayakumar S and others (eds), *Transboundary Pollution: Evolving Issues of International Law and Policy* (Edward Elgar Publishing 2015)

Boyle A and Harrison J, ‘Judicial Settlement of International Environmental Disputes: Current Problems’ (2013) 4 JIDS 245

Brower II CH, ‘Arbitration’ in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2007)

Brownlie I, ‘Why Do States Take Disputes to the International Court?’ in Ando N and others (eds), *Liber Amicorum Judge Shigeru Oda* vol 2 (Kluwer Law International 2002)

Brunnée J, ‘Common Areas, Common Heritage, and Common Concern’ in Bodansky D, Brunnée J and Hey E (eds), *The Oxford Handbook of International Environmental Law* (OUP 2007)

Burkett M, 'Loss and Damage' (2014) 4 CL 119

Caflisch L, 'The OSCE Court of Conciliation and Arbitration: Some Facts and Issues ' in Bothe M, Ronzitti N and Rosas A (eds), *The OSCE in the Maintenance of Peace and Security: Conflict Prevention, Crisis Management and Peaceful Settlement of Disputes* (Kluwer Law International 1997)

—, 'Cent Ans de Règlement Pacifique des Différends Interétatiques' (2001) 288 *Recueil des Cours* 245

Caldwell LK, *International Environmental Policy: From the Twentieth to the Twenty-First Century* (3 edn, Duke University Press 1996)

Cardesa-Salzmänn A, 'Constitutionalising Secondary Rules in Global Environmental Regimes: Non-Compliance Procedures and the Enforcement of Multilateral Environmental Agreements' (2012) 24 JEL 103

Cassese A, 'The Concept of 'Legal Dispute' in the Jurisprudence of the International Court' (1975) 14 *Communication e Studi* 173

Chambers WB, 'Towards an Improved Understanding of Legal Effectiveness of International Environmental Treaties' (2004) 16 *Geo Int'l Envtl L Rev* 501

Chambers WB, *Interlinkages and the Effectiveness of Multilateral Environmental Agreements* (UN University Press 2008)

Chayes A and Chayes AH, *The New Sovereignty: Compliance with International Regulatory Agreements* (HUP 1995)

Chinkin C, *Third Parties in International Law* (Clarendon Press 1993)

—, ‘International Environmental Law in Evolution’ in Jewell T and Steele J (eds), *Environmental Decision-Making: National, European, and International Perspectives* (OUP 1998)

—, ‘Intervention Before the International Court of Justice’ in Weiss F (ed), *Improving WTO Dispute Settlement Procedures: Issues and Lessons from the Practice of Other International Courts and Tribunals* (Cameron May 2000)

—, ‘Article 63’ in Zimmermann A and others (eds), *The Statute of the International Court of Justice: A Commentary* (2 edn, OUP 2012)

Churchill R, ‘Maritime Delimitation in the Jan Mayen Area’ (1985) 9 MP 16

—, ‘Trends in Dispute Settlement in the Law of the Sea: Towards the Increasing Availability of Compulsory Means’ in French D, Saul M and White ND (eds), *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010)

—, ‘Dispute Settlement in the Law of the Sea: Survey for 2013’ (2015) 30 IJMCL 1

Churchill R and Owen D, *The EC Common Fisheries Policy* (OUP 2010)

Churchill R and Ulfstein G, ‘Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law’ (2000) 94 AJIL 623

Collier J and Lowe V, *The Settlement of Disputes in International Law: Institutions and Procedures* (OUP 2000)

Colloquium IU, *Increasing the Effectiveness of the International Court of Justice: Proceedings of the ICJ/UNITAR Colloquium to Celebrate the 50th Anniversary of the Court* vol 29 (Peck C and Lee RS eds, Kluwer Law International 1997)

Comment E, 'The Fur Seal Question' (1907) 1 AJIL 742

Cooper CA, 'The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms' (1986) 24 Canadian Ybk Intl L 247

Cot J-P, *International Conciliation* (Myers RH tr, Europa 1972)

—, 'Conciliation' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006)

Crawford J, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (CUP 2002)

—, *State Responsibility: The General Part* (CUP 2013)

Crocker CA, Hampson FO and Aall PR, *Taming Intractable Conflicts: Mediation in the Hardest Cases* (United States Institute of Peace Press 2004)

Crook JR, 'In re Indus Waters Kishenganga Arbitration (Pakistan v. India)' (2014) 108 AJIL 308

d' Argent P, 'Reparation and Compliance' in Bannelier K, Christakis T and Heathcote S (eds), *The ICJ and the Evolution of International Law: the Enduring Impact of the "Corfu Channel" Case* (Routledge 2012)

Darwin HG, 'Mediation and Good Offices' in Waldock H (ed), *International Disputes: The Legal Aspects, Report of a Study Group of the David Davies Memorial Institute of International Studies* (Europa Publication 1972)

de León PS, 'Diplomatic and Judicial Means of Dispute Settlement and How They Got Along in the Pulp Mills Case' in Boisson de Chazournes L, Kohen M and Vicuña O (eds), *Diplomatic and Judicial Means of Dispute Settlement* (Martinus Nijhoff Publishers 2012)

Dean RS and Swain RE, *Report Submitted to the Trail Smelter Arbitral Tribunal* (United States Government Printing Office 1944)

Del Mar K, 'The International Court of Justice and Standards of Proof' in Bannelier K, Christakis T and Heathcote S (eds), *The ICJ and the Evolution of International Law : the Enduring Impact of the "Corfu Channel" Case* (Routledge 2012)

Desai B and Sidhu B, 'The Kishenganga Final Award: Is the Indus Waters Treaty at the Crossroads?' (2014) 49 EPW 10

Djeffal C, 'The Iron Rhine Case – A Treaty's Journey from Peace to Sustainable Development' (2011) 71 ZaöRV 569

Doring P, 'Whaling Plan Was to Divert Public' *The Sydney Morning Herald* (Sydney, 5 January 2011)

Dörr O, 'General Rule of Interpretation' in Dörr O and Schmalenbach K (eds), *Vienna Convention on the Law of Treaties: A Commentary* (Springer 2012)

Dryzek JS and Hunter S, 'Environmental Mediation for International Problems' (1987) 31 ISQ 87

Dupuy P-M and Viñuales JE, *International Environmental Law* (CUP 2015)

Dupuy R-J and Vignes D, *A Handbook on the New Law of the Sea*, vol 2 (Martinus Nijhoff Publishers 1991)

Elias O, 'The UN Compensation Commission and Liability for the Costs of Monitoring and Assessment of Environmental Damage' in Fitzmaurice M and Sarooshi D (eds), *Issues of State Responsibility Before International Judicial Institutions* (Hart Publishing 2004)

Faure MG and Nollkaemper A, 'International Liability as an Instrument to Prevent and Compensate for Climate Change' (2007) 43A *Stan J Int'l L* 123

Fernández Egea RM, 'State Responsibility for Environmental Harm, "Revisited" within the Climate Change Regime' in Maljean-Dubois S and Rajamani L (eds), *La mise en oeuvre du droit international de l'environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011)

Fischer G, 'La Banque Internationale pour la Reconstruction et le Développement et l'Utilisation des Eaux de l'Indus' (1960) 6 *AFDI* 669

Fitzmaurice M, 'Equipping the Court to Deal with Developing Areas of International Law: Environmental Law' in Peck C and Lee RS (eds), *Increasing the Effectiveness of the International Court of Justice: Proceedings of the ICJ/UNITAR Colloquium to Celebrate the 50th Anniversary of the Court* (Martinus Nijhoff Publishers 1997)

—, 'International Protection of the Environment' (2001) 293 *Recueil des Cours* 9

—, 'The International Court of Justice and Environmental Disputes' in French D, Saul M and White ND (eds), *International Law and Dispute Settlement: New Problems and Techniques* (Hart Publishing 2010)

—, 'Necessity in International Environmental Law' (2010) 41 *Netherlands Ybk Intl L* 159

—, *Whaling and International Law* (CUP 2015)

Fitzmaurice M and Redgwell C, 'Environmental Non-Compliance Procedures and International

Law' (2000) 31 Netherlands Ybk Intl L 35

Fodella A, 'Structural and Institutional Aspects of Non-Compliance Mechanisms' in Treves T and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C. Asser Press 2009)

Foster CE, 'New Clothes for the Emperor? Consultation of Experts by the International Court of Justice' (2014) 5 JIDS 139

Francioni F, 'Dispute Avoidance in International Environmental Law' in Kiss A, Shelton D and Ishibashi K (eds), *Economic Globalization and Compliance with International Environmental Agreements* (Kluwer Law International 2003)

French D, 'Environmental Dispute Settlement: The First (Hesitant) Signs of Spring?' (2006) 19 Hague Ybk Intl L 3

Gaja G, 'A New Way for Submitting Observations on the Construction of Multilateral Treaties to the International Court of Justice' in Fastenrath U and others (eds), *From Bilateralism to Community Interest: Essays in Honour of Judge Bruno Simma* (OUP 2011)

Gautier P, 'Locus Standi and Breaches of the United Nations Convention on the Law of the Sea: Some Reflection in Light of the Decision of the ICJ in the Case Concerning Questions Relating to the Obligation to Prosecute or Extradite (Belgium vs Senegal)' in Kolodkin RA and Kolodkin AL (eds), *Международное морское право: статьи памяти АЛ Колодкина : International Law of the Sea: Essays in Memory of Anatoly L Kolodkin* (Statyt Moskva 2014)

Gautier P, 'Standing of NGOs and Third-Party Intervention before the International Tribunal for the Law of the Sea' (2014) 1 RBDI 205

Geddis E and Ridings P, 'Whaling in the Antarctic: Some Reflections by Counsel' (2013) 11 New Zealand Ybk Intl L 143

Gehring T, 'International Environmental Law Regimes: Dynamic Sectoral Legal Systems' (1990) 1 YIEL 35

Gill TD, *Litigation Strategy at the International Court: A Case Study of the Nicaragua v. United States Dispute* (Martinus Nijhoff 1989)

Gillespie A, *Conservation, Biodiversity and International Law* (Edward Elgar Publishing 2011)

Glowka L, Burhenne-Guilmin F and Synge H, *A Guide to the Convention on Biological Diversity* (IUCN the World Conservation Union 1994)

Goldsmid FJ, *Eastern Persia: An Account of the Journeys of the Persian Boundary Commission 1870-71-72*, vol 1 (Macmillan and Co. 1876)

Grabowska G, 'Environmental Conflicts In Border Areas ' in Bardonnnet D (ed), *Le Règlement Pacifique des Différends Internationaux en Europe: Perspectives d'Avenir* (Martinus Nijhoff Publishers 1992)

Gray C, 'Current Development: The 2014 Judicial Activity of the ICJ' (2015) 109 AJIL 583

Gray C and Kingsbury B, 'Developments in Dispute Settlement: Inter-State Arbitration Since 1945' (1992) 63 British Ybk Intl L 97

Gros G, 'The ICJ's Handling of Science in the Whaling in the Antarctic Case: A Whale of a Case?' (2015) 6 JIDS 578

Gul N and others, 'Pakistan's Foreign Policy Survey January - June 2007—Staff Study' (2007) 60 Pakistan Horizon 3

Gulhati ND, *Indus Waters Treaty: An Exercise in International Mediation* (Allied Publishers 1973)

Guzman AT, 'International Tribunals: A Rational Choice Analysis' (2008-2009) 157 U Pa L Rev 171

Hafner G, 'The Physiognomy of Disputes and the Appropriate Means to Resolve Them' in Nation TU (ed), *International Law as a Language for International Relations* (Kluwer International Law 1996)

Handl G, 'Compliance Control Mechanisms and International Environmental Obligations' (1997) 5 Tulane J Intl & Comp L 29

Hanqin X, *Transboundary Damage in International Law* (CUP 2003)

Happold M, 'Dams and International Law' in Boisson de Chazournes L and Salman SMA (eds), *Les Ressources en eau et le Droit International = Water Resources and International Law* (Martinus Nijhoff Publishers 2005)

Harimoto Y, 'The ICJ Judgment on the Whaling Case: Some Reflections' (2014) 3 AALCO J Intl L 31

Harrison J, 'Reflections on the Role of International Courts and Tribunals in the Settlement of Environmental Disputes and the Development of International Environmental Law' (2013) 25 JEL 501

Hefny MAM, 'International Water Issues and Conflict Resolution: Some Reflections' (1995) 7 RADIC 360

Helper LR, 'The Effectiveness of International Adjudicators' in Romano C, Alter KJ and Avgerou C (eds), *The Oxford Handbook of International Adjudication* (OUP 2013)

Helper LR and Slaughter A-M, 'Toward a Theory of Effective Supranational Adjudication'

(1997) 107 Yale LJ 273

Helm C and Sprinz D, 'Measuring the Effectiveness of International Environmental Regimes' (2000) 44 JCR 630

Henriksen T, Hønneland G and Sydnes AK, *Law and politics in ocean governance : the UN Fish Stocks Agreement and regional fisheries management regimes* (Martinus Nijhoff Publishers 2006)

Hey E, *Reflections on an International Environmental Court* (Kluwer Law International 2000)

—, 'Common Interests and the (Re)constitution of Public Space' (2009) 39 EPL 152

Higgins R, 'The Desirability of Third-Party Adjudication: Conventional Wisdom or Continuing Truth?' in Fawcett JES and Higgins R (eds), *International Organization: Law in Movement: Essays in Honour of John McMahon* (OUP 1974)

Hirata K, 'Why Japan Supports Whaling' (2005) 8 JIWLP 129

Hockman S, 'An International Court for the Environment' (2009) 11 Env L Rev 1

Holtzmann HM, 'Some Reflections on the Nature of Arbitration' (1993) 6 LJIL 265

Horn L, 'The Role of Mediation in International Environmental Law' (1993) 4 ADRJ 16

Indlekofer M, *International Arbitration and the Permanent Court of Arbitration* (Kluwer Law International Law 2013)

IOPC, *Incidents Involving the IOPC Funds 2013* (IOPC 2014)

Irmscher TH, 'Dogger Bank Incident (1904)' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006)

Jachec-Neale A, 'Fact-Finding' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2011)

Jacobsson M, 'Oil Pollution Liability and Compensation: An International Regime' (1996) 1 ULR 260

Jacur FR, 'Remarks on the Role of *Ex Curia* Scientific Experts in International Environmental Disputes' in Boschiero N and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013)

—, 'Triggering Non-Compliance Procedures' in Treves T and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C Asser Press 2009)

Jennings R, 'International Lawyers and the Progressive Development of International Law' in Makarczyk J (ed), *Theory of International Law at the Threshold of the 21st Century: Essays in Honour of Krzysztof Skubiszewski* (Kluwer Law International 1996)

Jessup P, 'El Chamizal' (1973) 67 AJIL 423

Juste-Ruiz J, 'The International Court of Justice and International Environmental Law' in Boschiero N and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013)

Kaufmann-Kohler G, 'Arbitration and the Need for Technical or Scientific Expertise' in PCA TIBot (ed), *Arbitration in Air, Space and Telecommunications Law: Enforcing Regulatory Measures: Papers Emanating from the Third PCA International Law Seminar, February 23, 2001* (Kluwer Law International 2002)

Khattak AR, 'World Bank Neutral Expert's Determination on Baglihar Dam: Implications for

India-Pakistan Relations' (2008) 61 PH 89

Kirchhoff L, *Constructive Interventions: Paradigms, Process and Practice of International Mediation* (Kluwer Law International 2008)

Kiss A, 'Present Limits to the Enforcement of State Responsibility for Environmental Damage' in Francioni F and Scovazzi T (eds), *International Responsibility for Environmental Harm*, vol Graham & Trotman/Martinus Nijhoff (1991)

—, 'Economic Globalization and the Common Concern of Humanity' in Kiss A, Shelton D and Ishibashi K (eds), *Economic Globalization and Compliance with International Environmental Agreement* (Kluwer Law International 2003)

Klein N, 'Settlement of International Environmental Law Disputes' in Fitzmaurice M, Ong DM and Merkouris P (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010)

Koh T and Lin J, 'The Land Reclamation Case: Thoughts and Reflections' (2006) 10 Singapore Ybk Intl L 1

Kolb R, *The International Court of Justice* (Perry A tr, Hart Publishing 2013)

Koopmans SMG, *Diplomatic Dispute Settlement: The Use of Inter-State Conciliation* (T.M.C. Asser Press 2008)

Kornicker Uhlmann EM, 'State Community Interests, Jus Cogens and Protection of Global Environment: Developing Criteria for Peremptory Norms' (1998-1999) 11 Geo Int'l Envtl L Rev 101

Koroma AG, 'The Binding Nature of the Decisions of the International Court of Justice' in Boisson de Chazournes L and Kohen M (eds), *International Law and the Quest for Its*

Implementation/Le Droit International Et La Quete de Sa Mise En Oeuvre: Liber Amicorum Vera Gowlland Debbas (Martinus Nijhoff Publishers 2010)

Koskenniemi M, 'Breach of Treaty or Non-Compliance? Reflections on the Enforcement of the Montreal Protocol' (1992) 3 YIEL 123

Koyano M, 'The Significance of Procedural Obligations in International Environmental Law: Sovereignty and International Co-operation' (2011) 54 Japanese Ybk Intl L 97

Kuhn AK, 'The Trail Smelter Arbitration—United States and Canada' (1941) 35 AJIL 665

Kuokkanen T, *International Law and the Environment: Variations on a Theme* (Kluwer Law International 2002)

Kütting G, *Environment, Society and International Relations: Towards More Effective International Agreements* (Routledge 2000)

Lammers JG, *Pollution of International Watercourses: A Search for Substantive Rules and Principles of Law* (Nijhoff 1984)

Lapidoth R, 'Some Reflections on Peaceful Means for the Settlement of Inter-State Disputes with Special Reference to the 1997 Convention on the Law of the Non-Navigational Uses of International Watercourses' in Sanchez R, Woled J and Tilly D (eds), *Proceedings of the First Biennial Rosenberg International Forum on Water Policy: Resolving Conflict in the Management of Water Resources* (University of California 1998)

Lauterpacht E, *Aspects of the Administration of International Justice* (Cambridge Grotius Publications Limited 1991)

Lauterpacht H, *The Development of International Law by the International Court* (CUP 1982)

- Lebow RN, 'Accidents and Crises: The Dogger Bank Affair' (1978) 31 *NavalWarCollRev* 66
- Lee RS, 'A Case for Facilitation in the Settlement of Disputes' (1991) 34 *German Ybk Intl L* 138
- Lefebvre R, 'Climate Change and State Responsibility' in Rayfuse R and Scott SV (eds), *International Law in the Era of Climate Change* (Edward Elgar Publishing 2012)
- Leigh K, 'Liability for Damage to the Global Commons' (1992) 14 *Australian Ybk Intl L* 129
- Lima LC, 'The Evidential Weight of Experts before the ICJ: Reflections on the Whaling in the Antarctic Case' (2015) 6 *JIDS* 621
- Llamzon AP, 'Jurisdiction and Compliance in Recent Decisions of the International Court of Justice' (2007) 18 *EJIL* 815
- Louka E, *International Environmental Law: Fairness, Effectiveness and World Order* (CUP 2006)
- Lowe V, 'Some Comments on Procedural Weaknesses in International Law' (2004) 98 *ASIL Proceedings* 37
- , 'The Function of Litigation in International Society' (2012) 61 *ICLQ* 209
- MacKenzie R, 'The Role of Dispute Settlement in the Climate Change' in Brunnée J, Doelle M and Rajamani L (eds), *Promoting Compliance in an Evolving Climate Regime* (CUP 2012)
- Malintoppi L, 'Methods of Dispute Resolution in Inter-state Litigation: When States Go to Arbitration Rather Than Adjudication' (2006) 5 *LPICT* 133
- Mansfield B, 'Compulsory Dispute Settlement after the Southern Bluefin Tuna Award' in Elferink AGO and Rothwell DR (eds), *Oceans Management in the 21st Century: Institutional Frameworks and Responses* (Martinus Nijhoff 2004)

Martens GFd and others, *Nouveau Recueil Général de Traités et Autres Actes Relatifs aux Rapports de Droit International: Continuation du Grand Recueil de G. Fr. de Martens* vol 13 (2^{ème} série edn, Dieterich 1888)

Mbengue MM, 'Between Law and Science: A Commentary on the Whaling in the Antarctic Case' (2015) 14 QIL 3

Mbengue MM and Das R, 'The ICJ's Engagement with Science: To Interpret or not to Interpret?' (2015) 6 JIDS 568

McCaffrey S, 'Of Paradoxes, Precedents, and Progeny: The Trail Smelter Arbitration 65 Years Later' in Bratspies RM and Miller RA (eds), *Transboundary Harm in International Law: Lessons from the Trail Smelter Arbitration* (CUP 2006)

—, *The Law of International Watercourses* (2 edn, OUP 2007)

McCallion KF and Sharma HR, 'Environmental Justice without Borders The Need for an International Court of the Environment to Protect Fundamental Environmental Right' (1999-2000) 32 Geo Wash JInt'l L& Econ 351

McDorman TL, 'The Dispute Settlement Regime of the Straddling and Highly Migratory Fish Stocks Convention' (1997) 35 Canadian Ybk Intl L 57

—, 'Implementing Existing Tools: Turning Words Into Actions—Decision-Making Processes of Regional Fisheries Management Organisations (RFMOs)' (2005) 20 IJMCL 423

Mehling MA, 'Betwixt Scylla and Charybdis? Effectiveness in International Environmental Law' (2002) 13 Finnish Ybk Intl L 129

Mehta JS, 'The Indus Water Treaty: A Case Study in the Resolution of an International River

Basin Conflict' (1988) 12 Natural Resources Forum 69

Merkouris P, 'Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay): Of Environmental Impact Assessments and "Phantom Experts" '

Merrills JG, *International Dispute Settlement* (5 edn, CUP 2011)

Mitchell R, 'Compliance Theory: An Overview' in Cameron J, Werksman J and Roderick P (eds), *Improving Compliance with International Environmental Law* (Earthscan Publications 1996)

Mitchell RB, 'Institutional Aspects of Implementation, Compliance, and Effectiveness' in Luterbacher U and Sprinz D (eds), *International Relations and Global Climate Change* (MIT Press 2001)

Moncel R, 'Dangerous Experiments: Scientific Integrity in International Environmental Adjudications after the ICJ's Decision in Whaling in the Antarctic' (2015) 42 ELQ 305

Mosk RM, 'The Role of Facts in International Dispute Resolution' (2003) 304 *Recueil des Cours* 9

Mosler H and Oellers-Frahm K, 'Article 94' in Simma B (ed), *The Charter of the United Nations: A Commentary*, vol 2 (2 edn, OUP 2002)

Moussa J, 'Implications of the Indus Water Kishenganga Arbitration for the International Law of Watercourses and the Environment' (2015) 64 ICLQ 697

Nations TU, *The United Nations Guidance for Effective Mediation* (UN 2012)

Naz F, 'Water: A Cause of Power Politics in South Asia' in Brebbia CA (ed), *Water and Society II* (WIT Press 2013)

Nordquist MH, Rosenne S and Sohn LB (eds), *United Nations Convention on the Law of the Sea 1982: A Commentary*, vol V (Martinus Nijhoff Publishers 1989)

Nyland N, 'What May Be the New International Environmental Law?' in Eriksen CC and Emberland M (eds), *The New International Law: An Anthology* (Martinus Nijhoff Publishers 2010)

Ochoa-Ruiz N, 'Dispute Settlement over Non-Navigational Uses of International Watercourses: Theory and Practice' in Boisson de Chazournes L and Salman SMA (eds), *Water Resources and International Law / Les ressources en eau et le droit international* (Martinus Nijhoff Publishers 2005)

Oda S, 'The International Court of Justice viewed from the Bench (1976-1993)' (1993) 244 *Recueil des Cours* 9

Okowa PN, 'Procedural Obligations in International Environmental Agreements' (1996) 67 *British Ybk Intl L* 275

—, 'Environmental Dispute Settlement: Some Reflections on Recent Developments' in Evans MD (ed), *Remedies in International Law: The Institutional Dilemma* (Oxford Hart 1998)

—, *State Responsibility for Transboundary Air Pollution in International Law* (OUP 2001)

Oppenheim L, *International Law*, vol 2 (Lauterpacht H ed, 7 edn, Longmans 1952)

Osgood WH, Preble EA and Parker GH, *The Fur Seals and other Life of the Pribilof Island, Alaska, in 1914* (Government Printing Office 1915)

Oyarce XH, 'Red Crusader Incident (1961)' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2007)

Palchetti P, 'Opening the International Court of Justice to Third States: Intervention and Beyond' (2002) 6 Max Planck UNYbk 139

Partsch KJ, 'Fact-Finding and Inquiry' in *Encyclopedia of Public International Law* (Elsevier 1997)

Paulson C, 'Compliance with Final Judgments of the International Court of Justice Since 1987' (2004) 98 AJIL 434

Pauwelyn J, 'Judicial mechanisms: Is there a need for a World Environment Court?' in Chambers WB and Green JF (eds), *Reforming International Environmental Governance: From Institutional Limits to Innovative Reforms* (United Nations University Press 2005)

Peat D, 'The Use of Court-Appointed Experts by the International Court of Justice' (2014) 84 British Ybk Intl L 271

Pechota V, *Complementary Structures of Third-Party Settlement of International Disputes* (UNITAR 1971)

Pedersen OW, 'An International Environmental Court and International Legalism' (2012) 24 JEL 547

Peel J, 'Unpacking the Elements of a State Responsibility Claim for Transboundary Pollution' in Jayakumar S and others (eds), *Transboundary Air Pollution: A Tale of Two Paradigms* (Edward Elgar Publishing 2015)

Pereira Pinto DD, *Fisheries Management in Areas beyond National Jurisdiction: The Impact of Ecosystem Based Law-making* (Martinus Nijhoff Publishers 2013)

Pinto MCW, 'The Prospects for International Arbitration: Inter-State Disputes' in Soons AHA

(ed), *International Arbitration: Past and Prospects* (Martinus Nijhoff Publishers 1990)

Pitman GTK, 'The Role of the World Bank in Enhancing Cooperation and Resolving Conflict on International Watercourses: The Case of the Indus Basin' in Salman SMA and Boisson de Chazournes L (eds), *International Watercourses: Enhancing Cooperation and Managing Conflict* (The World Bank 1998)

Plakokefalos I, 'International Courts and Tribunals and the Implementation of International Environmental Law' in Maljean-Dubois S and Rajamani L (eds), *La mise en oeuvre du droit international de l'environnement = Implementation of International Environmental Law* (Martinus Nijhoff Publishers 2011)

Posner EA and Yoo JC, 'Judicial Independence in International Tribunals' (2005) 93 Cal L Rev 1

Princen T, 'International Mediation—The View from the Vatican— Lessons from Mediating the Beagle Channel Dispute' (1987) 3 NJ 347

Rao PS, 'The Concept of International Community in International Law: Theory and Reality' in Buffard I and others (eds), *International Law between Universalism and Fragmentation: Festschrift in Honour of Gerhard Hafner* (Martinus Nijhoff Publishers 2008)

Ratliff DP, 'The PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or the Environment' (2001) 14 LJIL 887

Rayfuse R, 'Regional Fisheries Management Organisations and their Efforts and Measure to Regulate Fishing Activities' in Koch H-J and others (eds), *Legal Regimes for Environmental Protection: Governance for Climate Change and Ocean Resources* (Brill Nijhoff 2015)

Read JE, 'The Trail Smelter Dispute' (1963) 1 Canadian Ybk Intl L 213

Redgwell C, 'The Wrong Trousers: State Responsibility and International Environmental Law' in Koutrakos P and Evans M (eds), *The International Responsibility of the European Union – European and International Perspectives* (Hart Publishing 2013)

Reis TH, *Compensation for Environmental Damages under International Law: The Role of the International Judge* (Wolter Kluwer 2011)

Rest A, 'An International Court for the Environment: The Role of the Permanent Court of Arbitration' in PCA TIBot (ed), *International Alternative Dispute Resolution: Past, Present and Future: The Permanent Court of Arbitration Centennial Papers* (Kluwer Law International 2002)

Richardson EL, 'Jan Mayen in Perspective' (1988) 82 AJIL 443

Riddell A and Plant B, *Evidence before the International Court of Justice* (British Institute of International and Comparative Law 2009)

Ridings P, 'The Intervention Procedure in Whaling in the Antarctic: A Threat to Bilateralism?' (2014) 32 Australian Ybk Intl L 97

Rieu-Clarke A, Moynihan R and Magsig B-O, *UN Watercourses Convention User's Guide* (IHP-HELP Centre for Water Law 2012)

Rolin H, 'L' Heure de la Conciliation Comme Mode de Règlement Pacifique des Litiges' (1957) AE 3

—, 'La Conciliation Internationale' (1961) 49 AIDI 193

Romano C, *The Peaceful Settlement of International Environmental Disputes: A Pragmatic Approach* (The Hague Kluwer Law International 2000)

—, 'International Dispute Settlement' in Bodansky D, Brunnée J and Hey E (eds), *The Oxford*

Handbook of International Environmental Law (OUP 2007)

—, ‘The Role of Experts in International Adjudication’ in International StFapID (ed), *Le Droit International Face aux Enjeux Environnementaux* (A. Pedone 2010)

—, ‘Litigating International Law Disputes: Where to?’ in Klein N (ed), *Litigating International Law Disputes: Weighing the Options* (CUP 2014)

Rosenne S, ‘Visit to the Site by the International Court’ in Yakpo E and Boumedra T (eds), *Liber Amicorum: Mohammed Bedjaoui* (Kluwer International 1999)

—, ‘Settlement of Disputes, A Linchpin of the Convention: Reflections on fishery Management Disputes’ in DOALOS (ed), *Proceedings of the Twentieth Anniversary Commemoration of the Opening for Signature of the United Nations Convention on the Law of the Sea, New York, 9 and 10 December 2002* (UN 2003)

Rosenne S, *The Law and Practice of the International Court 1920-2005: Volume III Procedure* (4 edn, Martinus Nijhoff Publishers 2006)

Rosenne S, *The Law and Practice of the International Court 1920-2005: Volume I The Court and the United Nations* (4 edn, Martinus Nijhoff Publishers 2006)

—, ‘Arbitrations under Annex VII of the United Nations Convention on the Law of the Sea’ in Ndiaye TM, Wolfrum R and Kojima C (eds), *Law of the Sea, Environmental Law, and Settlement of Disputes: Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff Publisher 2007)

Rosenne S and Ronen Y, *The Law and Practice of the International Court, 1920-2005* (4 edn, Martinus Nijhoff Publishers 2006)

Rousseau C, ‘Le Conflit sur les Eaux de l' Indus’ (1961) 65 RGDIP 364

—, ‘Inde et Pakistan: Conclusion du Traité du 19 Septembre 1960 Relatif à l'Utilisation des Eaux de l'Indus’ (1961) 32 RGDIP 364

Rubin AP, ‘Pollution by Analogy: The Trail Smelter Arbitration’ (1970-1971) 50 Or L Rev 259

Rubin JZ, ‘Third-Party Roles: Mediation in International Environmental Disputes’ in Sjöstedt G (ed), *International Environmental Negotiation* (Sage Publications 1993)

Saadia T and Zartman W, ‘Introduction: Mediation in Theory’ in Saadia T and Zartman W (eds), *International Mediation in Theory and Practice* (Westview Press 1985)

Salman SMA, ‘Good Offices and Mediation and International Water Disputes’ in Arbitration TIBotPCo (ed), *Resolution of International Water Disputes: Papers Emanating from the Sixth PCA International Law Seminar November 8, 2002* (Kluwer International Law 2003)

—, ‘The Baglihar Difference and Its Resolution Process - A Triumph for the Indus Waters Treaty?’ (2008) 10 WP 105

—, ‘Mediation of International Water Disputes—The Indus, the Jordan and the Nile Basins Interventions’ in Boisson de Chazournes L, Leb C and Tignino M (eds), *International Law and Freshwater: The Multiple Challenges* (Edward Elgar Publishing 2013)

Salman SMA and Uprety K, *Conflict and Cooperation on South Asia's International River: A Legal Perspective* (Kluwer Law International 2002)

Sand PH, ‘Transnational Environmental Disputes’ in Bardonnnet D (ed), *Le règlement pacifique des différends internationaux en Europe: perspectives d'avenir* (Martinus Nijhoff Publishers 1992)

—, ‘Compensation for Environmental Damage from the 1991 Gulf War’ (2005) 35 EPL 244

Sands P, 'Enforcing Environmental Security: The Challenges of Compliance with International Obligations' (1993) 46 J Int'l Aff 367

—, 'Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law' in Ndiaye TM, Wolfrum R and Kojima C (eds), *Law of the Sea, Environmental Law, and Settlement of Disputes : Liber Amicorum Judge Thomas A Mensah* (Martinus Nijhoff Publisher 2007)

—, 'Science and International Litigation' in Alland D and others (eds), *Unité et Diversité du Droit International: Écrits en l'Honneur du Professeur Pierre-Marie Dupuy* (Martinus Nijhoff Publishers 2014)

Sands P and Mackenzie R, 'Guidelines for Negotiating and Drafting Dispute Settlement Clauses for International Environmental Agreements' in Arbitration TIBotPCo (ed), *International Investments and Protection of the Environment: The Role of Dispute Resolution Mechanisms* (2001)

Sands P and Peel J, *Principles of International Environmental Law* (3 edn, CUP 2013)

Sands P, 'Climate Change and the Rule of Law: Adjudicating the Future in International Law' JEL (Advance Access May 7, 2016)

Schachter O, 'The Enforcement of International Judicial and Arbitral Decisions' (1960) 54 AJIL 1

Schiffman HS, *Marine Conservation Agreements: The Law and Policy of Reservations and Vetoes* (Martinus Nijhoff Publishers 2008)

—, 'The South Pacific Regional Fisheries Management Organization (SPRFMO): An Improved Model of Decision-Making for Fisheries Conservation?' (2013) 3 J Environ Stud Sci 209

Schmahl S, 'Letelier and Moffitt Claim' in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2008)

Schulte C, *Compliance with Decisions of the International Court of Justice* (OUP 2004)

Scott JB (ed) *The Hague Court Reports* (OUP 1916)

Scott SV, 'Australia's Decision to Initiate Whaling in the Antarctic: Winning the Case Versus Resolving the Dispute' (2014) 68 *Australian JInt'l Aff* 1

Scovazzi T, 'Some Remarks on International Responsibility in the Field of Environmental Protection' in Ragazzi M (ed), *International Responsibility Today: Essays in Memory of Oscar Schachter* (Martinus Nijhoff Publishers 2005)

—, 'Between Law and Science: Some Considerations Inspired by the Whaling in the Antarctic Judgment' (2015) 14 *QIL* 13

Shany Y, *Assessing the Effectiveness of International Courts* (OUP 2014)

Shelton D, 'Form, Function, and the Powers of International Courts' (2008-2009) 9 *Chi J Int'l L* 537

Shigeta Y, 'Obligation to Protect the Environment in the ICJ's Practice: To What Extent Erga Omnes?' (2012) 55 *Japanese Ybk Intl L* 176

Shotaro H, 'Procedural Questions in the Whaling Judgment: Admissibility, Intervention and Use of Experts' (The Honorable Shigeru Oda Commemorative Lectures ICJ Judgment on Whaling in the Antarctic: Its Significance and Implications)

Sidhu B, 'The Kishenganga Arbitration: Transboundary Water Resources Governance ' (2013) 43 *EPL* 147

Simma B, 'From Bilateralism to Community Interest in International Law' (1994) 250 *Recueil des Cours* 217

—, 'The International Court of Justice and Scientific Expertise' (2012) 106 *ASIL Proceedings* 229

Stephens T, 'The Limits of International Adjudication in International Environmental Law: Another Perspective on the Southern Bluefin Tuna Case' (2004) 19 *IJMCL* 177

—, *International Courts and Environmental Protection* (CUP 2009)

—, 'The Settlement of Disputes in International Environmental Law' in Alam S and others (eds), *Routledge Handbook of International Environmental Law* (Routledge 2012)

—, 'International Environmental Disputes: To Sue or Not to Sue?' in Klein N (ed), *Litigating International Law Disputes: Weighing the Options* (CUP 2014)

—, 'Principle 26: International Environmental Dispute Settlement' in Viñuales JE (ed), *The Rio Declaration on Environment and Development: A Commentary* (OUP 2015)

Strauss A, 'Climate Change Litigation: Opening the Door to the International Court of Justice' in Burns WCG and Osofsky HM (eds), *Adjudicating Climate Change: State, National, and International Approaches* (CUP 2009)

Susani N, 'Conciliation and Other Forms of Non-Binding Third Party Dispute Settlement' in Crawford J and others (eds), *The Law of International Responsibility* (OUP 2010)

Susskind L and Babbitt E, 'Overcoming Obstacles to Effective Mediation of International Disputes' in Bercovitch J and Rubin J (eds), *Mediation in International Relations: Multiple Approaches to Conflict Management* (Saint Martin's Press 1992)

Susskind L and Cruikshank J, *Breaking the Impasse: Consensual Approaches to Resolving Public Disputes* (BasicBooks 1987)

Szabó M, 'Gabčíkovo-Nagymaros Dispute: Implementation of the ICJ Judgment' (2009) 39 EPL 97

Takei Y, *Filling Regulatory Gaps in High Seas Fisheries: Discrete High Seas Fish Stocks, Deep-sea Fisheries and Vulnerable Marine Ecosystems* (Martinus Nijhoff Publishers 2013)

Tamada, D 'On the Way to Definitive Settlement of Dispute: Lessons from the Whaling Case' (2014) 32 Australian Ybk Intl L 113

Tams CJ, 'Article 50' in Zimmermann A and others (eds), *The Statute of the International Court of Justice: A Commentary* (2 edn, OUP 2012)

—, 'Article 51' in Zimmermann A and others (eds), *The Statute of the International Court of Justice: A Commentary* (OUP 2012)

Tanzi A, 'Recent Trends in International Water Law Dispute Settlement' in Arbitration TIBotPCo (ed), *International Investments and Protection of the Environment: The Role of Dispute Resolution Mechanisms* (Kluwer Law International 2001)

Tanzi A and Milano E, 'Article 33 of the UN Watercourses Convention: A Step Forward for Dispute Settlement?' (2013) 38 WI 166

Tanzi A and Pitea C, 'The Interplay between EU Law and International Law Procedures in Controlling Compliance with the Aarhus Convention by EU Member States' in Pallemmaerts M (ed), *The Aarhus Convention at Ten: Interactions and Tensions Between Conventional International Law and EU Environmental Law* (Europa Law Publishing 2011)

Thirlway H, *The Law and Procedure of the International Court of Justice: Fifty Years of Jurisprudence* (OUP 2013)

Timsit G, 'Le Fonctionnement de la Procédure d'Enquête dans l'Affaire du Red Crusader' (1963) 9 AFDI 460

Tomka P and Wordsworth SS, 'The First Site Visit of the International Court of Justice in Fulfillment of Its Judicial Function' (1998) 92 AJIL 133

Tomuschat C, 'International Courts and Tribunals with Regionally Restricted and/or Specialized Jurisdiction' in Law MPIfCPLaI (ed), *Judicial Settlement of International Disputes: International Court of Justice, Other Courts and Tribunals, Arbitration and Conciliation* (Springer Verlag 1974)

Touval S and Zartman IW, 'Mediation in International Conflicts' in Kressel K (ed), *Mediation Research: The Process and Effectiveness of Third-Party Intervention* (Jossey-Bass 1989)

Treves T, 'Recent Trends in the Settlement of International Dispute' in *Cursos Euro-Mediterráneos Bancaja de Derecho Internacional*, vol 1 (Aranzadi 1997)

—, 'International Organization As Parties to Contentious Cases: Selected Aspects' in Romano C, Boisson de Chazournes L and MacKenzie R (eds), *International Organizations and International Dispute Settlement: Trends and Prospects* (Transnational Publishers 2002)

—, 'The Settlement of Disputes and Non-Compliance Procedures' in Treves T and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreements* (T.M.C. Asser Press 2009)

—, 'Introduction' in Treves T and others (eds), *Non-Compliance Procedures and Mechanisms and the Effectiveness of International Environmental Agreement* (T.M.C. Asser Press 2009)

Ulfstein G, 'Dispute Resolution, Compliance Control and Enforcement in International Environmental Law' in Ulfstein G, Marauhn T and Zimmermann A (eds), *Making Treaties Work: Human Rights, Environment and Arms Control* (OUP 2007)

—, 'International Framework for Environmental Decision-Making' in Fitzmaurice M, Ong DM and Merkouris P (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010)

Umbricht V, 'Principles of International Mediation: The Case of the East African Community' (1984) 187 *Recueil des Cours* 307

—, *Multilateral Mediation: Practical Experiences and Lessons* (Martinus Nijhoff Publishers 1989)

UN, *Handbook on the Peaceful Settlement of Disputes between States* (UN Publication 1992)

Vajić N, 'Diplomatic Settlement or Adjudication? Advantages and Drawbacks' in Caflisch L (ed), *Règlement Pacifique des Différends entre États: Perspectives Universelle et Européenne = The Peaceful Settlement of Disputes between States: Universal and European Perspectives* (Kluwer Law International 1998)

Van Asbeck FM, 'La Tâche et l'Action d'une Commission de Conciliation' (1956) 3 *NTIR* 1

Vicuña FO, 'A New System of International Dispute Settlement for the Twenty-First Century' in Barea CAA and others (eds), *Liber Amicorum "In Memoriam" of Judge José Mariá Ruda* (Kluwer Law International 2000)

Vicuña O, 'Current Trends in Responsibility and Liability for Environmental Harm under International Law' in Koufa K (ed), *Protection of the Environment for the New Millennium: Thesaurus Acroasium Vol XXXI* (Sakkoulas Publications 2002)

—, ‘Mediation’ in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2010)

Vinuales JE, ‘Legal Techniques for Dealing with Scientific Uncertainty in Environmental Law’ (2010) 43 *VandJTransnat'l L* 437

Viñuales JE, *Foreign Investment and the Environment in International Law* (CUP 2012)

Von Bogdandy A and Venzke I, ‘On the Functions of International Courts: An Appraisal in Light of Their Burgeoning Public Authority’ (2013) 26 *LJIL* 49

Weiss EB, ‘The Evolution of International Water Law’ (2007) 331 *Recueil des Cours* 163

—, ‘The Coming Water Crisis: A Common Concern of Humankind’ (2012) 1 *TEL* 153

—, *International Law for a Water-Scarce World* (Martinus Nijhoff Publishers 2013)

Wellens K, *Negotiations in the Case Law of the International Court of Justice* (Taylor and Francis 2014)

White GM, *The Use of Experts by International Tribunals* (Syracuse University Press 1965)

Williams W, ‘Reminiscences of the Bering Sea Arbitration’ (1943) 37 *AJIL* 562

Wirsing RG, Jasparro C and Stoll DC, *International Conflict over Water Resources in Himalayan Asia* (Palgrave Macmillan 2012)

Wolfrum R, ‘Means of Ensuring Compliance with and Enforcement of International Environmental Law’ (1998) 272 *Recueil des Cours* 9

—, ‘Enforcing Community Interests Through International Dispute Settlement: Reality or Utopia?’ in Fastenrath U and others (eds), *From Bilateralism to Community Interest: Essays in Honour of Judge Bruno Simma* (OUP 2011)

—, ‘Interventions in Proceedings Before International Courts and Tribunals: To What Extent May Interventions Serve the Pursuance of Community Interests?’ in Boschiero N and others (eds), *International Courts and the Development of International Law: Essays in Honour of Tullio Treves* (T.M.C. Asser Press 2013)

Wouters P and Tarlock AD, ‘The Third Wave of Normativity in Global Water Law: The duty to Cooperate in the Peaceful Management of the World's Water Resources: An Emerging Obligation Erga Omnes?’ 23 JWL 51

Young MA, *Trading Fish, Saving Fish: The Interaction between Regimes in International Law* (CUP 2011)

Young OR, ‘Effectiveness of International Environmental Regimes: Existing Knowledge, Cutting-Edge Themes, and Research Strategies’ (2011) 108 PNAS 19853

Zimmermann A, ‘International Courts and Tribunals: Intervention in Proceedings’ in Wolfrum R (ed), *The Max Planck Encyclopedia of Public International Law* (OUP 2006)

Zimmermann A, ‘Between the Quest for Universality and its Limited Jurisdiction: The Role of the International Court of Justice in Enhancing the International Rule of Law’ in Gaja G and Stoutenburg JG (eds), *Enhancing the rule of law through the International Court of Law* (Martinus Nijhoff Publishers 2014)

WEBSITES

http://www.cancilleria.gov.co/sites/default/files/Litigio%20Nicaragua-Col/acuerdo_firmado.pdf

‘Acuerdo Entre la República del Ecuador y la República de Colombia para la Solución de la Controversia Existente en la Corte Internacional de Justicia, Relativa a la Erradicación Aérea por Colombia de Los Cultivos Ilícitos Cerca de la Frontera con Ecuador’

<http://www.icj-cij.org/presscom/files/7/3007.pdf>

‘Address by the President of the International Court of Justice, Judge Stephen M. Schwebel, ‘Speech to the General Assembly of the United Nations’ (27 October 1998)’ (ICJ)

<http://www.buenosairesherald.com/article/142005/argentina-takes-botnia-pulp-mill-dispute-to-the-hague>

‘Argentina Takes Botnia Pulp Mill Dispute to the Hague’ (Buenos Aires Herald)

<http://www.thefreelibrary.com/Australia+ends+ban+on+Japanese+tuna+boats.-a075332331>

‘Australia Ends Ban on Japanese Tuna Boats’ (Japan Weekly Monitor)

https://www.indianembassy.org/archives_details.php?nid=926

‘Baglihar Dam Cleared by Neutral Expert’ (Embassy of India)

<http://www.mea.gov.in/press-releases.htm?dtl/2287/Baglihar+Dam+cleared+by+neutral+expert>

‘Baglihar Dam Cleared by Neutral Expert’ (Ministry of External Affairs, Government of India)

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPM/ANUAL/0,,contentMDK:20064701~menuPK:64701637~pagePK:64709096~piPK:64709108~theSitePK:502184~isCURL:Y,00.html>

‘Bank Procedures 7.50 - Projects on International Waterways’ (World Bank)

<http://www.icj-cij.org/court/index.php?p1=1&p2=4>

‘Chambers and Committees’ (ICJ)

<http://www.ipcc.ch/report/ar5/wg1/>

‘Climate Change 2013: The Physical Science Basis’ (IPCC)

<https://www.sprfmo.int/assets/Meetings/Meetings-2013-plus/Commission-Meetings/2nd-Commission-Meeting-2014-Manta-Ecuador/Annex-G-CMM-2.-01-Trachurus-Murphyi.pdf>

‘CMM 2.01 Conservation and Management Measure for *Trachurus murphyi*’ (SPRFMO)

<http://www.icj-cij.org/presscom/files/7/10307.pdf>

‘Constitution of a Chamber of the Court for Environmental Matters’ (ICJ)

<http://www.dawn.com/news/1069839>

‘Dawn-Editorial, ‘Verdict on Baglihar Dam’ (Dawn)

<http://www.thehindu.com/todays-paper/tp-opinion/dealing-with-pakistans-fears-on-water/article2838585.ece>

‘Dealing with Pakistan's Fears on Water’ (The Hindu)

<http://www.icj-cij.org/jurisdiction/index.php?p1=5&p2=1&p3=3>

‘Declarations Recognizing the Jurisdiction of the Court as Compulsory’ (ICJ)

https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=I-4&chapter=1&lang=en#EndDec

‘Declarations Recognizing as Compulsory the Jurisdiction of the International Court of Justice under Article 36, paragraph 2, of the Statute of the Court’ (ICJ)

<http://www.un.org/undpa/diplomacy-mediation>

‘Diplomacy and Mediation’ (UN)

<http://www.unep.org/disastersandconflicts/Introduction/ECP/EnvironmentalDiplomacy/tabid/105991/Default.aspx>

‘Environmental Diplomacy and Mediation Support’ (UNEP)

<http://www.unep.org/regionalseas/publications/reports/rsrs/pdfs/rsrs122.pdf>

‘Environmental Impact Assessment’ (UNEP)

<http://www.unece.org/fileadmin/DAM/env/pp/compliance/MoP2decisions/Ukraine/Bystroev/Final%20decision%20Ukraine%20Bystroe.pdf>

‘Final Decision Taken by Ukraine Concerning the Full Scale Implementation of the Danube-Black Sea Navigation Route Project in the Ukrainian Part of the Danube Delta’ (Ministry of Foreign Affairs of Ukraine)

http://www.unece.org/fileadmin/DAM/env/pp/compliance/CC_GuidanceDocument.pdf

‘Guidance Document on the Aarhus Convention Compliance Mechanism’ (UNECE)

<http://www.unep.org/delc/Portals/119/UNEP.Guidelines.on.Compliance.MEA.pdf>

‘Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreement’ (UNEP)

<https://www.prorail.nl/projecten/ijzeren-rijn>

‘IJzeren Rijn’

http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/2016_forIC35/Letter_to_Belarus_VI.2_followup_IC34_rev.pdf

‘Implementation Committee of the Espoo Convention (16 December 2015)’ (UNECE)

http://www.iopcfunds.org/uploads/tx_iopecpublications/incidents2013_e.pdf

‘Incident Involving the IOPC Funds 2013’ (IOPC)

<https://cites.org/sites/default/files/eng/com/sc/46/46-11-3.pdf>.

‘Interpretation and Implementation of the Convention: Possible Measures for Non-Compliance, Document Prepared by the CITES Secretariat for the 46th Meeting of the Standing Committee, 12-15 March 2002, SC46 Doc. 11.3’ (CITES)

https://archive.iwc.int/pages/terms.php?ref=3545&search=%21collection104&k=&url=pages%2Fdownload_progress.php%3Fref%3D3545%26size%3D%26ext%3Dpdf%26k%3D%26search%3D%2521collection104%26offset%3D0%26archive%3D0%26sort%3DDESC%26order_by%3Drelevance

‘Japan’s Opening Statement to the 65th Meeting of the International Whaling Commission’ (Minister for Agriculture, Forestry and Fisheries)

<http://www.japantimes.co.jp/news/2014/11/18/national/japan-to-hunt-antarctic-whales-but-cut-catch-target-by-two-thirds/#.VGtCo4d3aV4>

‘Japan to Hunt Antarctic Whales, But Cut Catch Target by Two-Thirds’ (Japan Times)

<http://kluwerarbitrationblog.com/2015/07/16/kishenganga-arbitration-and-viability-of-international-arbitration-in-resolving-state-to-state-disputes/>

‘Kishenganga Arbitration and Viability of International Arbitration in Resolving State-to-State Disputes’ (Kluwer Arbitration Blog)

http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIsept2001fao.pdf

‘List of Experts in the Field of Fisheries Maintained by the Food and Agriculture Organization of the United Nations (communicated on 27 September 2001)’ (UN)

<http://hungarytoday.hu/news/43312-2-lmp-gabcikovo-nagymaros-dams-should-be-back-on-agenda-69944>

‘LMP: Gabčíkovo-Nagymaros Dams Should Be Back on Agenda’ (Hungary Today)

http://www.unece.org/fileadmin/DAM/env/eia/decisions/Decision_VI.2.pdf

‘Meeting of the Parties at Sixth Session (Geneva, 2-5 June 2014) Decision on Review of Compliance (Decision VI/2)’ (UNECE)

http://www.mfa.gov.sg/content/mfa/media_centre/press_room/pr/2014/201407/press_20140709.printable.html?status=1

‘MFA Press Release: Transcript of Senior Minister of State for Foreign Affairs Masagos Zulkifli's reply to Parliamentary Questions’ (Minister of Foreign Affairs of Singapore)

http://www.mfa.gov.sg/content/mfa/media_centre/press_room/pr/2015/201501/press_20150120.printable.html?status=1

‘MFA Press Release: Transcript of Second Minister for Foreign Affairs Grace Fu’s Reply to the Parliamentary Question and Supplementary Questions’ (Minister of Foreign Affairs of Singapore)

http://www.unece.org/fileadmin/DAM/env/pp/mop5/Documents/In-session_docs/ECE.MP.PP.2014.CRP.10.ENG.pdf

‘MOPs to the Aarhus Convention, Report of the Fifth Meeting, ECE/MP.PP/2014/CRP.10’ (UNECE)

http://www.unece.org/fileadmin/DAM/env/pp/mop4/Documents/ece_mp_pp_2011_L_19_e.pdf

‘MOPs to the Aarhus Convention, Report of the Fourth Meeting, ECE/MP.PP/2011/L.19’ (UNECE)

http://www.unece.org/fileadmin/DAM/env/documents/2008/pp/mop3/ece_mp_pp_2008_L_8_add_6_e.pdf

‘MOPs to the Aarhus Convention, Report of the Second Meeting, Decision II/5b’ (UNECE)

<http://en.mercopress.com/2010/07/29/mujica-and-cfk-announce-agreement-to-jointly-monitor-the-river-uruguay>

‘Mujica and CFK Announce Agreement to Jointly Monitor the River Uruguay’
(MercoPress)

<http://www.beehive.govt.nz/release/icj-decision-harpoons-‘scientific’-whaling>
Murray McCully, ‘ICJ Decision Harpoons ‘Scientific’ Whaling’

[http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPM
ANUAL/0,,contentMDK:20064667~menuPK:64701637~pagePK:64709096~piPK:6470
9108~theSitePK:502184,00.html](http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTOPM
ANUAL/0,,contentMDK:20064667~menuPK:64701637~pagePK:64709096~piPK:6470
9108~theSitePK:502184,00.html)
‘Operation Manual 7.50 - Projects on International Waterways’ (World Bank)

[https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-
Arbitration-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf](https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-
Arbitration-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf)
‘PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and/or
the Environment’ (PCA)

[https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-
Conciliation-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf](https://pca-cpa.org/wp-content/uploads/sites/175/2016/01/Optional-Rules-for-
Conciliation-of-Disputes-Relating-to-the-Environment-and_or-Natural-Resources.pdf)
‘PCA Optional Rules for Conciliation of Disputes Relating to Natural Resources and/or
the Environment’ (PCA)

<http://www.jfa.maff.go.jp/e/pdf/danwa.pdf>
‘Policy towards the Future Whale Research Programs Statement by Minister for
Agriculture, Forestry and Fisheries, the Government of Japan’ (Government of Japan)

http://www.mofa.go.jp/press/kaiken/kaiken4e_000059.html
‘Press Conference by Foreign Minister Fumio Kishida, Tuesday, April 1, 2014, 8:39 a.m.
Front Entrance Hall, Prime Minister’s Office’ (Ministry of Foreign Affairs of Japan)

<http://www.jfa.maff.go.jp/j/whale/pdf/newrep--a.pdf>

‘Proposed Research Plan for New Scientific Whale Research Program in the Antarctic Ocean (NEWREP-A)’ (Government of Japan)

http://www.mofa.go.jp/ecm/fsh/page2e_000012.html

‘Remarks by the Agent of Japan, Koji Tsuruoka’ (Ministry of Foreign Affairs of Japan)

http://www.mfa.gov.sg/content/mfa/media_centre/special_events/p...e_center/remarks_in_parliament/2005/200505/press_200505_1.html

‘Remarks In Parliament By Singapore Foreign Minister George Yeo On The Settlement Agreement Between Singapore and Malaysia On Land Reclamation’ (Minister of Foreign Affairs of Singapore)

http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/2016_forIC35/IC34Lithuania18012016.pdf

‘Regarding Follow-Up Decision VI/2 of the Meeting of the Parties’ (The Ministry of Environment of the Republic of Lithuania)

http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.1/Report_of_Ukraine_Danube-Black%20Sea_Oct08_main.pdf

‘Report of the Government of Ukraine on the Implementation of Decision IV/2 of Parties to the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), adopted on the 4th Meeting of Parties to the Convention held on 19-21st May, 2008 in Bucharest’ (UNECE).

http://www.mfa.gov.sg/content/mfa/media_centre/press_room/if/2005/200501/infocus_20050114_03.html

‘Report of the Group of Independent Experts (GOE) in the matter of the ITLOS Order of 8 October 2003’ (Minister of Foreign Affairs of Singapore)

<http://www.unece.org/fileadmin/DAM/env/documents/2011/eia/decision.V.4.e.pdf>

‘Report by the MOPs at Fifth Session (Decision V/4 on Review of Compliance)’
(UNECE)

http://www.ccsbt.org/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_07/report_of_ccsbt7.pdf

‘Report of the Seventh Annual Meeting of the Commission 18 - 21 April 2001, Review of Southern Bluefin Tuna Fisheries of Japan in 1999 Fishing Season’ (CCSBT)

http://www.ccsbt.org/userfiles/file/docs_english/meetings/meeting_reports/ccsbt_06/report_of_ccsbt6_Part1.pdf

‘Report of the Sixth Annual Meeting: First Part, New Zealand Opening Statement CCSBT6(1) 29-30 November 1999’ (CCSBT)

http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.4/frLithuania24Nov2014/21-11-2014_letter.pdf

‘Report on Steps Taken by Lithuania in Regard to the Implementation of the Findings and Recommendations of the Espoo Convention Implementation Committee’ (The Ministry of Environment of the Republic of Lithuania)

<http://www.sprfmo.int/new-meetingpage-News/archive-news/russian-federation-accepts-recommendations/>

‘Russian Federation Accepts’ (SPRFMO)

<http://amsterdamlawforum.org/article/view/133/255#sdendnote4sym>

Sandrine Maljean-Dubois, ‘An Outlook for the Non-Compliance Mechanisms of the Kyoto Protocol on Climate Change’

http://www.un.org/depts/los/settlement_of_disputes/conciliators_arbitrators.htm

‘Settlement of Disputes Mechanism: Lists of Conciliators and Arbitrators Nominated under Article 2 of Annexes V and VII to the Convention’ (UN)

<http://www.scoop.co.nz/stories/WO0008/S00030.htm>

‘Southern Bluefin Tuna Case’ (Australian Government)

<http://www.icj-cij.org/presscom/files/6/18376.pdf>

‘Speech by H.E. Judge Peter Tomka, President of the International Court of Justice, at the 66th Session of the International Law Commission’ (ICJ)

<http://www.icj-cij.org/presscom/files/3/14123.pdf>

‘Speech by H.E. Judge Rosalyn Higgins to the Sixth Committee of the General Assembly’ (ICJ)

<http://www.mofa.go.jp/announce/announce/2000/8/807.html>

‘Statement by Foreign Minister Yohei Kono on the Award on Jurisdiction and Admissibility on the Southern Bluefin Tuna Case rendered by the Arbitral Tribunal constituted under Annex VII of the United Nations Convention on the Law of the Sea’ (Minister of Foreign Affairs of Japan)

<http://www.icj-cij.org/presscom/files/4/17374.pdf>

‘Statement by H.E. Judge Peter Tomka, President of the International Court of Justice, at the Plenary Session of the St. Petersburg International Legal Forum’ (ICJ)

<http://www.scoop.co.nz/stories/PA0008/S00151.htm>

‘Tuna Case has Brought Progress’ (New Zealand Government, Hon Phil Goff Minister of Foreign Affairs and Trade)

http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIInov2002unep.pdf

‘The List of Experts in the Field of Protection and Preservation of the Marine Environment Maintained by the United Nations Environment Programme’ (communicated on 8 November 2002) (UN)

http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIimo.pdf

‘The List of Experts Nominated in the Field of Navigation, Including Pollution from Vessels and by Dumping as at 25 October 2013’ (UN)

http://www.un.org/Depts/los/settlement_of_disputes/expertsunclosVIIIimay2011iocunesco.pdf

‘The List of Experts on Marine Scientific Research for use in Special Arbitration under Annex VIII of UNCLOS drawn up and maintained by UNESCO/IOC as of 20 May 2011’ (UNESCO/IOC)

http://www.justitiaetpace.org/idiE/resolutionsE/2005_kra_01_en.pdf

‘The Resolution concerning Obligations *Erga Omnes* in International Law’ (The Institute of International Law, Fifth Commission, (Krakow Session 2005), Rapporteur: Giorgio Gaja)

<http://www.neafc.org/system/files/Consolidated%20bottom%20regulations%20amended%20by%20recommendation%2012%202013.pdf>

‘The Consolidated Text of All NEAFC Recommendations on the regulating of bottom fishing’ (NEAFC)

http://www.unece.org/fileadmin/DAM/env/eia/decisions/Decision_VI.2.pdf

‘The Meeting of the Parties at its Sixth Session, Decision on Review of Compliance (Decision VI/2)’ (UNECE)

<http://minpriroda.gov.by/en/news-en/view/speech-of-the-head-of-belarusian-delegation-first-deputy-minister-of-natural-resources-and-environmental-1832/>

‘The Speech of the Head of Belarusian Delegation, First Deputy Minister of Natural Resources and Environmental Protection of the Republic of Belarus Mrs. Iya Malkina at the 35th session of the Implementation Committee of the Espoo Convention’ (Minister of Natural Resources and Environmental Protection of the Republic of Belarus)

http://www.unece.org/fileadmin/DAM/env/eia/documents/ImplementationCommittee/eia.ic.s/eia.ic.s.1/BCP_TEIA_30dec08_sect_5.pdf

‘The Summary Report on the Assessment of Likely Transboundary Environmental Impacts of the Danube-Black Sea Navigation Route in the Ukrainian Part of the Danube Delta which was submitted to the Espoo Implementation Committee’ (UNECE)

http://www.mfa.gov.sg/content/mfa/media_centre/press_room/tr/2005/200504/transcript_20050429.html

‘Transcript of Press Conference by Professor Tommy Koh, Agent of the Government of Singapore for the Reclamation Issue and Mrs Cheong Koon Hean, Deputy Secretary (Special Duties), Ministry Of National Development at the MFA’ (Minister of Foreign Affairs of Singapore)

<http://www.un.org/wcm/webdav/site/undpa/shared/undpa/pdf/UN%20Guidance%20for%20Effective%20Mediation.pdf>

‘United Nations Guidance for Effective Mediation’ (UN)

<https://treaties.un.org/doc/Publication/MTDSG/Volume%20II/Chapter%20XXI/XXI-6.en.pdf>

‘UNCLOS: Declarations and Reservations’ (UN)

<http://www.ag.gov.au/Internationalrelations/InternationalLaw/Pages/WhalingintheAntarcticLitigation.aspx>

‘Whaling in the Antarctic Litigation’ (Australian Government, Attorney-General’s Department)

http://news.bbc.co.uk/1/hi/world/south_asia/6356061.stm

‘World Bank Rules on Kashmir Dam’ (BBC)

<http://tribune.com.pk/story/648986/kishanganga-project-victory-claims-cloud-final-arbitration-award/>

Zafar Bhutta and Shahram Haq, 'Kishanganga Project: Victory Claims Cloud Final Arbitration Award' (The Express Tribune)